Professional fields—Qualifications as prescribed above OR Good academic record with recognised professional work of about 7 years which should include innovation and/or research and development.

Lecturer in Computer Science—Master's Degree in the field of Computer Science or equivalent OR S.E./B. Tech. in Computer Science with First Class. One year teaching/ professional experience desirable. *In absence of candidate from SC post is likely to be filled from open category.*

Age Limit as per rules.

8 copies of prescribed application forms can be had from University Office on payment of Rs. 25/- through Bank Draft in favour of undersigned and applications alongwith D.D. of Rs. 15/- as application fee should reach the undersigned by **30th Sept. 1986.**

S.S. Chaube
REGISTRAR

OFFICE OF THE PRINCIPAL REGIONAL ENGINEERING COLLEGE

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4. Experience of guiding research at Doctorate level.

Desirable

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2. Experience in curriculum development.
3. Published work of high standard.
4. Membership of Professional bodies.
   Age : Between 35 to 50 years.

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Essential

1. A first class (or equivalenti) Master's Degree/ Doctorate Degree in appropriate field of Engineering/ Technology.
2. Consistently good academic record with a Bachelor's Degree in appropriate branch of Engineering/ Technology. First class at Bachelor's Degree and/or Master's degree level.
3. At'east 5 years experience in teaching/ Research at the Institute of University standard.

Desirable

1. Professional/ Scientific/Research work of outstanding merit.
2. Experience in curriculum Development.
3. Published work of high standard.
4. Membership of professional bodies.
   Age : Below 45 years.

The posts shall carry the allowances as admissible by the State Government of Himachal Pradesh approved by the Board of Governors from time to time.

Candidates in Government service/semi Government service/Public undertaking must apply through proper channel.

Age limit relaxable in case of well qualified candidates.

No Rail/Bus fare or T.A./D.A. will be paid to the candidates appearing for interview.

The applications should reach the office of Principal, Regional Engineering College, Hamirpur-177 001 by **25th September, 86.**

The candidates should attach with application a self addressed envelope 4"×10" duly stamped worth Rs. 3.25 superscribed "APPLICATION FOR THE POST OF (NAME OF THE POST) REGIONAL ENGINEERING COLLEGE"

The application should be typed, giving the name of candidate, father's name, date of birth, address for correspondence, permanent address, educational qualification, category to which belongs etc. The photostat attested copies testimonials (duly attested by the candidate himself) alongwith a recent passport size photograph should be attached with the applications.

The Principal reserve the right to increase or decrease the number of posts.

Each application should accompany a crossed postal order in the name of Principal, Regional Engineering College, Hamirpur (HP) amounting to Rs. 7.50 paise. No Draft/Cheque shall be accepted.

JADAVPUR UNIVERSITY

CALCUTTA-700 032

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—One post

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OR

An outstanding Engineer/Technologist with established reputation who has made significant contribution to knowledge.

Desirable/Other requirements

(i) Good academic record with a Master's degree in Printing Technology or equivalent.

(ii) Out of a total minimum ten year's experience of which five years in teaching, research

Last date of receiving application is **September 22, 1986.**

Application forms are obtainable from the University Office during working hours on payment of Rs. 2/- or by post on payment of Rs. 3/- including postages. Higher initial salary may be given to really deserving candidates. Those who are in employment should submit their applications through proper channel. Choice of Appointment Committee will not necessarily be confined to applicants only. Canvassing in any form will disqualify a candidate.

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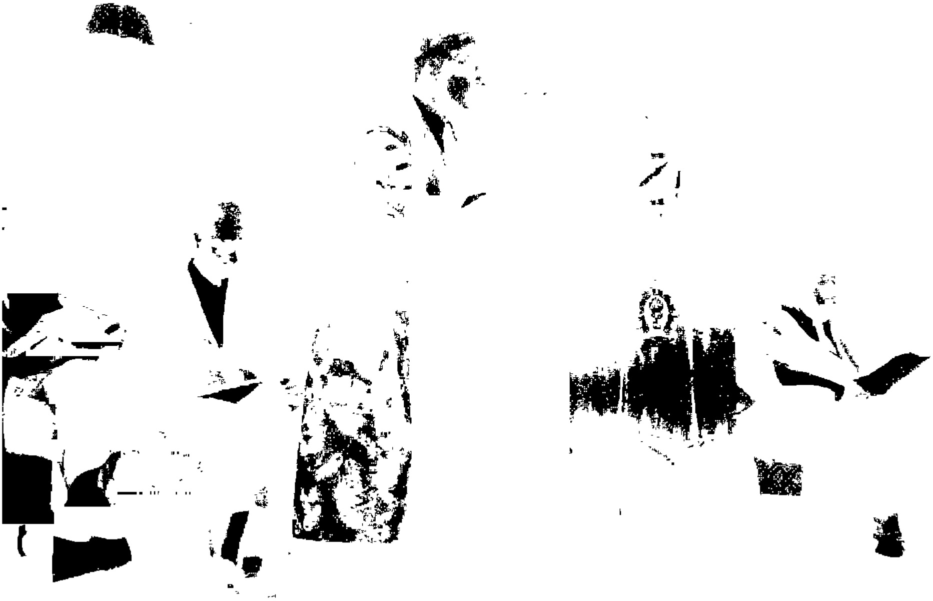

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Opinions expressed in the articles are those of the contributors and do not necessarily reflect the policies of the Association.

Editor:
SUTINDER SINGH

Technical Hindi and Educational System

J.N. Kapur*

India was the world leader in Mathematics and Science till about the twelfth century A.D. Today we are at least fifty years behind some advanced countries. We have to catch up with these countries and forge ahead of them. This can and must be done within the next fifty years. For achieving this goal, we have to develop our human resources in full measure. Next to China, we have the biggest reservoir of human resources. However these resources have to be developed through a meaningful and planned educational system. So far we have developed less than one per cent of our human resources. Seventy percent of our people are illiterate, another twenty per cent have just the knowledge of three Rs and less than one per cent have received any worthwhile education in science and technology. Even with this small development of our resources, we have done very well in every field of science and technology. If we develop all our resources, we can achieve our goal.

The U.S.A. is today undoubtedly the world leader in science and technology. It has about ten crores of persons with a knowledge of science upto the high school level and it is from this large reservoir that it builds up its cadre of top scientists and technologists. In India our reservoir of persons with basic scientific knowledge is relatively small. If we develop in the same way as in U.S.A., we can have four times as many first-rate scientists and technologists as that country has. In spite of its own big reservoir of scientific talent, the U.S.A. has gone out of its way to attract scientific talent from all over the world. In fact India has contributed significantly to the growth of science and technology in the U.S.A. We must also develop, train and nurture our scientific talent with a sense of purpose.

If we need only a few thousand scientists and technologists, we can train them through English medium, but if we need them in hundreds of thousands, we can only train them through Hindi and the regional languages. We need scientific and technological training, not only for the professional scientists and technologists, we need it even more for building up a scientific temper in the country, for sweeping away superstitions, for building up objectivity and rationalism and for raising the intellectual level of everyone in society. For this purpose, science education has to be given on mass scale.

Some years ago when 10+2+3 programme was introduced, I was a member of the seven-member committee which drew up the common curriculum for the ten-year programme and it was this committee which steered the programme for ten year compulsory training in both mathematics and science for all students in the country. However the implementation of this programme has left much to be desired. There are thousands of schools without properly equipped laboratories and what is worse, without properly trained teachers to teach science and mathematics. A massive training programme for teachers is urgently needed. Of course the teaching of mathematics and science would be easier through Hindi medium.

Indian Institute of Technology, Kanpur

Sometimes objection is raised to schools being equipped with computers when a large number of schools do not have even proper blackboards However the reason for the absence of chalk boxes and blackboards is certainly not lack of funds but because very often 98 per cent budget of the school is used up for salary of teachers We should have provision in the education code that salary budget should never exceed 70 per cent of school budget so that with every increase of salaries of teachers, the school should get more money for blackboard and equipment In any case we should see to it that our children received the computer-based education since computers have become an essential component of modern technology However computer training should also be through the Hindi medium

All mathematics and science education in schools can be and should be given through the Hindi medium, but we need a massive programme of producing good text-books good supplementary readers, good popular books and good popular magazines in Hindi For this purpose we require funds and dedicated teachers and scientists It is unfortunate that even today we do not have a mathematics magazine in Hindi though we have excellent ones in Gujarati, Marathi Bengali and English and even though more than three crores of children study mathematics through Hindi medium in our schools We also do not have a magazine comparable to 'Science Today' in Hindi We also need popular literature in Hindi on science for adults and we also need popular talks an A I R and popular audio visual programmes on science on T V in Hindi

Even science and technology education at the under graduate and postgraduate levels can be given through the Hindi medium Hindi is sufficiently powerful and has a rich vocabulary One major difficulty here is the lack of familiarity of many college and university teachers with technical Hindi in general and with Hindi terminology in particular This difficulty however can be easily overcome through short-term training programmes and workshops Another major difficulty is the lack of textbooks of high standards in Hindi During the last eighteen years the five Hindi Academies have published about eighty university level books in mathematics, thirty of which are translations and fifty of these are original In the same period the number of books published on Mathematics in English in India may be of the order of eight hundred and the number of books published in the whole world in English on mathematics may be more than eighty thousand These figures give us an idea of the magnitude of the efforts that have to be made for publishing books in Hindi at the university level

The thirty translations are of standard text-books which were in use thirty or forty years ago but which are now only classics The original books are of an average standard In many cases the authors apparently did not put in their best, since they were not sure whether these books would be used at all These books cover about 75 per cent of the topics taught at the undergraduate level and about 10 per cent of the topics taught at the postgraduate level As such no university can teach today mathematics through Hindi at the postgraduate level and only universities with traditional syllabi may be able to teach mathematics at the undergraduate level It is argued that if all the universities of a state decide to teach mathematics and science at the undergraduate level through Hindi from 1987 onwards, one year will be enough to flood the market with textbooks in all the subjects This is quite true, but then teaching through Hindi will have to be made compulsory If it is optional as at present then English textbooks will continue to be used and no new textbook in Hindi will be written If this step is taken, then there will be another difficulty There will not be enough supplementary and reference books in libraries in Hindi since most of the libraries are stocked with English books only This will not be a big loss for more than eighty per cent of our students who in any case do not read more than one textbook or help book but it will certainly harm the small minority which is interested in reading widely and from which ultimately all good scientists and technologists come It is hoped however that this minority will be able to use the English books in the library At the postgraduate level the universities can decide to introduce teaching through Hindi by 1988 or 1989 thus giving enough time to authors and publishers to produce books in Hindi

Even when these decisions are taken of changing the medium to Hindi we should insist on students of science being proficient in technical English and suitable courses may be devised for this purpose They will also have to be bilingual as far as terminology is concerned They will have to learn both Latin-based English and Sanskrit-based Hindi terminologies The mathematical equations will have to be written in Roman script as is done even in Russian and German books

The students will have to do some extra work in learning technical English and double terminology but then the effort they have to make today in learning through a foreign medium is much greater Moreover

(Continued on page 7)

A Systematic Approach to Revaluation

N. L. Mishra*

Revaluation is a system in which a candidate who is not satisfied with his examination result can get his answer-book(s) reassessed. The second assessment, naturally, has to be done by an examiner other than the one who assessed that answer-book originally. The process of revaluation also includes scrutiny i.e. totalling of marks awarded for each question and ensuring whether any question or part of it has been left unassessed. Thus the underlying spirit behind the system of revaluation is just to know the actual standard of the examinee and to minimise the error of original assessment, if any.

There are innumerable cases in which marks increase or decrease considerably after revaluation. However, it is very difficult to say which one of the two assessments is nearer to the actual standard of the examinee. Thus to take everage of the two awards into considertion is the most workable solution. There are some universities where awards of second assessment, if these were disadvantageous to the candidate, were not considered. In such universities the number of applications for revaluation increased year by year at a very fast rate. Majority of the students apply for revaluation in the hope of betterment. On the other hand where average of the two awards and even disadvantageous position are taken into consideration the number of such applicants is not very large. In short, the concept of revaluation is based on the probabilities of errors in original assessment because of various factors such as subjectivity, carelessness and victimization, etc.

Scope

In fact, revaluation of answer-books is a sort of facility which should not be provided very liberally, otherwise it ultimately affects the administrative arrangements for the next examination. It may be provided for limited courses such as postgraduate and undergraduate courses in the faculties of Arts, Science and Commerce. It should not, as far as possible, be permitted in respect of postgraduate examinations in the faculties of Engineering and Medicine etc. The scripts of practical examinations, sessional/periodical tests, dissertations, thesis and viva-voce too should be kept out of scope for revaluation. In the same manner special examinations, supplimentary examination and examination for backlog and bycotted papers also should not be considered for revaluation.

A candidate who is declared eligible for supplementary examination as a result of revaluation should be permitted to appear at the usual supplimentary examination or if the same is already over, at the time of next main examination. Such a candidate may also be allowed to appear at the next higher examination as a non-collegiate candidate, if such facility exists for the examination concerned.

Students' Demands

Before considering various aspects of revaluation system it is desirable to analyse various demands, generally raised by the students community in this regard. Such complaints/demands can be summarised as under:

1. The fee (Rs. 50/-) per paper (in Rajasthan University) is on higher side; it should be reduced;
2. It takes a long time in declaration of revaluation results;
3. Marks actually increased as a result of second evaluation should be added. In other words there should be no everaging of two awards. However, if the marks are decreased as a result of revaluation the original marks should stand;
4. There are cases where variation between the awards of the original examiner and the revaluation is quite large. All such cases should be referred to some third examiner;
5. Even in cases where variation between the first assessment and the second assessment is not more than 5%, the actual marks should be added;
6. If there is a marked change in the nature of result to the disadvantage of the applicant, on account of revaluation, say from first devision to second division, second to third division or pass to fail, such revaluation should not be taken into account; and
7. Revaluation fee should be refunded to the candidate if his marks increase.

Officer on Special Duty, University of Rajasthan, Jaipur.

Analysis of the Students' Demands

Let us examine and analyse each of these demands and their varied implications :

(a) Fee

Regarding the amount of fee it may be kept in view that it is not only compensation towards the expenditure incurred on reassessment of the answer-books but also a very effective instrument to discourage the number of applicants. In most of the Indian universities the amount of fee varies from Rs. 50/- to Rs 100/- per paper. In spite of the fee of Rs. 50/- per paper, in the University of Rajasthan, the number of applicants ranges between 15,000 to 20,000 involving near about 35,000 answer-books. The extra work-load created by such a huge number of applications may be very well imagined. Needless to mention that a low fee structure may encourage the number of applicants. The number of applications should be viewed from the angle that the results are declared in time, say latest by 30th November so that the administrative arrangements for the next examination may not be disturbed.

(b) Time Taken for Revaluation

The time, generally, given for submission of application for revaluation is 30 days from the date of declaration of result. Besides, all the steps involved in revaluation such as sorting of answer-books, scrutiny, dispatch of answer-books to the examiners' residences, averaging of marks, correction in Tabulation Register and preparation of revised marks-sheets are time consuming items. On an average it takes 1½ to 2 months for completing the whole process. It may be noted that in the main examination, lots of 200-300 answer-books are sent to the examiners; the despatch work too is a one time job. However, the situation is different in revaluation. Here the despatch work is a continuous process. Sometimes the bundle may contain only two or three answer-books. Thus despatching work of revaluation is a very slow process. However, it is also true that unless the revaluation work is planned and administered as a time bound programme no real relief can be provided to the student community. The whole scheme should be planned in such a way that each step is completed within a stipulated time. Duration/days may be allotted for each step. Experience shows that if proper monitoring is done to expedite the functioning at all steps, it should not take more than 30 to 40 days in completing the whole process.

(c) Averaging of Marks

It is difficult to say whether original or second assessment is nearer to the actual standard of the examinee. Factor of chance variation is always there with the assessment. Many a surveys have been conducted on this point and most of the researchers are of the view that variation in assessment from man to man and from time to time is a natural phenomenon. If two persons of equal or similar standing examine an answer-book, the awards could be different. Even if the same examiner examines the same answer-book, after an interval of some time, the valuation could be different. This is what is known as chance variation. As the variation may differ from case to case some range should be fixed to standardise it. Most of the experts in the field of examination management are of the view that 5% of the maximum marks prescribed for a paper be taken as the limit for chance variation. It may be called 'standard variation'. To be more specific if the standard variation is 5 the marks may vary in the range of 10. In other words, if one examinee has been awarded 35 marks his actual standard may be somewhere between 30 and 40. As the 'chance variation' is to be attributed to chance alone any variation within this range may be ignored and the marks awarded by the original examiner may stand. Or say, if the marks awarded by the revaluator is in plus or minus to the original award by 5%, the original marks may be kept as they are.

However, within the zone of chance or standard variation if the nature of result is going to change to the advantageous side simply by adding the increased marks, such cases deserve sympathetic consideration. Maybe that error is on the part of the examiner who examined the answer-book originally. Thus the benefit of doubt should be given to the examinee. It may be illustrated as under:

Marks awarded originally:	33
Minimum pass marks:	36
Marks actually required for passing:	3
Marks awarded by revaluator:	37
Range of standard variation within which increase of marks may not be effected because of the concept of 'chance variation':	28 to 38
Result if chance variation is ignored:	Pass (marks 37)
Result if chance variation is taken into consideration in aforesaid manner:	Fail

Needless to mention in such hard cases (where the nature of result is effected) chance variation should be interpreted to the benefit of the student.

Any variation more than the standard variation, specified above, cannot be attributed to 'chance'. It may be rather because of subjectivity or negligence on the part of either of the examiners. In such cases, averaging is a must. If the variation is still higher the answer-book may be referred to a third examiner. In short, there may be three categories :

(a) If the variation is within the zone of standard variation i.e. 5%, the marks of original assessment may stand;

(b) If the variation is from 5% to 15% or 20%, average of original and revaluated marks be taken into account; and

(c) If the variation is still more, the answerbook may be referred to a third examiner.

Logically this scheme is all right, but administratively calculation in three different manners may create problems. These problems may get more accentuated specially in the universities where the number of the students is too large. In certain universities cases having variation of more than 10% are referred to a third examiner. In fact, this is possible only where the number of applicants is comparatively small. In bigger universities like that of Rajasthan University, Jaipur even the number of cases having variation of more than 10% comes to thousands. Thus in such universities it is desirable that this percentage is increased to 20.

Keeping all these factors in view such as simplification of procedure, administrative expediency and interpretation of chance variation to the advantage of the student community the following frame may be adopted for calculation of revaluation results :

(i) Averaging of marks awarded by the original examiner and the revaluator should be done in all cases.

(ii) If the variation between the award of the original examiner and that of revaluator is 20% or more than 20% of the marks prescribed for a paper, the answerbook should be referred to a third examiner. After the third assessment, average of the two close awards should be taken into account and marks revised accordingly.

(iii) If the variation between the award of the original examiner and that of the revaluator is less than 20%, the average of the two (awards) should be taken into account, provided that in case of decrease the marks should be decreased upto the extent that the nature of the result for that examination does not change. In examinations where there is no provision for awarding division, the percentage equal to first, second or pass divisions should be cosidered as the limits for this purpose.

(d) Number of Papers Permissible

Number of students and variety of schemes of examination are the basic factors which determine the quantum of papers permissible for revaluation. Larger the number of students, lesser should be the scope for revaluation in particular examination. In most of the

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universities revaluation is permissible in 25% to 50% of the papers. In larger universities like that of the Universities of Rajasthan, Jaipur where the number of applications is in thousands, it is desirable that revaluation is allowed only in 25% of the theory papers.

Procedural Steps

From the view point of systematization, review and monitoring the whole process of revaluation can be organised into the following procedural steps :

A. Receipt of application for revaluation
B. Registration of application
C. Collection of answer-books
D. Scrutiny
E. Preparatory work in revaluation cell
F. Putting up fictitious roll numbers
G. Despatch of answerbooks for second assessment
H. Averaging of marks
I. Correction of result
J. Communication of result to the candidate

Division of Work

To expedite the results and minimise the chances of leakage it is desirable that different types of jobs should be entrusted to the different teams; each team consisting of the responsible officers. Thus the persons putting fictitious Roll Nos. are not supposed to know the names of examiners to whom the answer-books are being sent. Vice-versa the persons despatching answer-books to the examiners will not know the actual Roll Numbers. These teams may be constituted in the following manner. The number of teams may actually be determined by the number of applications.

Team No. 1 For putting fictitious Roll Nos. : There may be 3 teams ; each team dealing with a different faculty:

(a) Arts

(b) Commerce

(c) Science & Professional

Team No. 2 For despatching answer-books : There may be 3 teams; each team dealing with a different faculty:

(a) Arts
(b) Commerce
(c) Science & Professional

Team No. 3 For making correction in the tabulation register. The concerned Section Officers of the Conduct and Secrecy sections may be given this responsibility.

Note : The cases where third assessment is involved should directly be handled by the Dy. Registrar and Asstt. Registrar of the revaluation section. In fact, result of these cases may get delayed because of third assessment. Thus such cases need special attention and close monitoring.

A Time Bound Programme

Unless the revaluation work is taken as a 'time bound programme' no real relief can be provided to the candidates. Our examination schemes are varying a lot. On the other hand students have started availing of the facility for revaluation very liberally. With the result the number of applications for revaluati may increasing very fast. This challenge is to be met increased efficiency. Each person/team involved in revaluation process should have feeling that a particular job is to be finished within a given time.

Time schedule for various jobs/steps

(i)	Sending applications from cash Branch to Revaluation Cell	On the same day daily by 4 pm
(ii)	Determination of eligibility and registration	One day
(iii)	Sending requisition to the Cellor	One day
(iv)	Supply of answer-books from the cellor to Revaluation Cell after scrutiny	4 days for UG and 6 days for PG classes
(v)	Preparation of revaluation statement andhanding over of answer-books to Team No. 1	One day
(vi)	Pasting slips on original awards, removal of covers, putting fictitious Roll Nos., and handing over answer-books to	

	the Despatch team i.e. team No. 2 (for a lot of 500 answer-books)	Five days
(vii)	Despatch of Answar-books by team No. 2	Two days
(viii)	Maximum time for assessment :	
(a)	If the examiner is local:	Six days
(b)	If the examiner is outsider:	Fifteen days
(ix)	Sending of awards by Team No. 2 to Team No. 1.	Two days
(x)	Averaging of marks and sending awards to Team No. 3	Three days
(xi)	Correction in Tabulation Registers by team No. 3	Six days
(xii)	Communication of result by Revaluation Cell.	Three days
(xiii)	Preparation and despatch of revised/original marks-sheet by Conduct Branch	Five days

Note : The above time schedule has been prepared keeping the disposal of 500 answer-books per day in view.

Thus in normal conditions result for revaluation should be communicated to the candidate within 40 to 45 days positively. In cases of third evaluation the duration may be approximately 2 months.

Review and Monitoring

Revaluation is such a process in which different jobs are done by different persons/teams. Needless to mention that such a distribution is done just to minimise the chances of leakage and expediting the process. However, expediency is solely dependent on a very important factor i.e. daily monitoring. The main role of the officer(s) incharge is to develop a system of monitoring and proper coordination between the various teams. They should ensure that the reports are received from each team daily. On the basis of reports received from the incharges of various teams, they should submit a weekly progress report to the Registrar/Controller of Examinations. □

Technical Hindi and Educational System

(Continued from page 2)

even after this greater effort, they do not have the satisfaction of really understanding the subject. The universities in Hindi-speaking states may collectively decide on a phased programme of making Hindi medium compulsory, of preparing courses in technical English, of preparing courses in double terminology, of training of teachers, etc. They may also earmark 20 to 25 per cent of the budget on science books in the libraries for books on science in Hindi.

Funds for subsidising good books in Hindi on mathematics, science and technology should be substantial, because if these books are too costly the students will not be able to buy them. At the research level all encouragement may be given to journals in Hindi. Awards may be instituted for best papers in Hindi. Research survey articles may be specially commissioned. Students may be allowed to submit their theses in Hindi, provided they also submit certified translations in English and their additional expenses may be met. However there should be no compulsion at this stage. In this process, learning of English should not be weakened. All all-India conferences should still continue to be in English, but regional conferences may be held in regional languages. We should continue to have all all-India scientific journals in English. However due to the large number of Hindi-speaking persons, there should be good scope for journals in Hindi also.

Agriculture education may be given through Hindi. However we may go slow on changes in technological and medical education.

The Educational System is aimed at transmission of existing knowledge and creation of new knowledge. Both these processes can be carried out effectively only through the language of the people and not through a foreign language. If cramming has to go and creative thinking has to become a habit for large masses of our countrymen, change to Hindi medium is essential, but this change should be brought about in a phased, planned and coordinated manner without weakening the position of English as the link language with the rest of the scientific world both in India and abroad. □

National Conference on Distance Education

The Association of Indian Universities will organise in collaboration with the Indira Gandhi National Open University and Gujarat University a National Conference on Distance Education on 9th and 10th November, 1986.

Despite a phenomenal increase in educational facilities since independence, the Indian education system is not able to cope with the rising number of students who aspire for admission every year. Higher education system is confronted with enormous shortages of teachers, buildings and equipment. These shortages are likely to mount further because of our inability to raise matching resources. This is true not only of India but of all the countries the world over.

Distance education is regarded as an effective alternative to the formal system and most of the countries are making increasing use of the method of teaching at a distance. This method denotes the application of multi-media approach to the entire teaching-learning process. It is thought that distance education will provide solutions to the educational problems of spread of knowledge and skills as well as in raising the general level of education of the masses. Introduction of correspondence courses by several universities is to be seen in this context. Establishment of the Indira Gandhi National Open University and the fact that many State Governments have either established open universities or are planning to do so is only pointer to the popularity and acceptability of the concept of distance education. The National Conference on Distance Education is being organised in recognition of the need for formulating appropriate policies and strategies to lend meaning and substance to the concept of distance education. The focus of the Conference will be on the following themes :

(a) Concept of distance education
(b) Forms of distance education
(c) Course designing and preparation
(d) Role of media in distance education
(e) Financing of distance education
(f) Student support services
(g) Evaluation methodology

Programme

The Conference will be conducted under four panels as per following programme. It will conclude with a plenary session.

November 9, 1986	
Session I (Inaugural)	10.30 a.m. - 11.30 a.m.
Session II	11.45 a.m. - 1.15 p.m.
Session III	2.30 p.m. - 5.00 p.m.
November 10, 1986	
Session IV (Plenary)	10.00 a.m. - 12.00 noon

Participation

Delegates from various universities and other institutions of distance education (including correspondence courses) are invited to participate. Governmental and private organisations in the fields of electronics, space information, data processing and satellite educational programmes may also participate. Such participation can be either in terms of presenting a paper or demonstration of educational technologies, aids and other learning devices developed in India and abroad.

Exhibition

It is proposed to hold an exhibition of books, journals, equipment for Video, TV and Computer aided instruction and demonstrations of new technologies during the Conference. Entries are invited for the exhibition.

Venue

The venue of the Conference and the exhibition will be the Gujarat University, Ahmedabad.

Language

The official language of the Conference will be English.

Further details can be had from the conveners.

Conveners

B.N. Koul
Professor of Distance Education
Indira Gandhi National Open University
K-76, Hauz Khas
New Delhi - 110016

M.M. Ansari
Project Director (Research)
Association of Indian Universities
AIU House
16 Kotla Marg
New Delhi - 110002

Interdisciplinary Approach to Foreign Language Teaching

J.P. Dimri* and V.S.S. Sastry*

The concept of interdisciplinary studies is not new. It already exists in disciplines suh as Social Sciences, Natural Sciences, Behavioural Sciences, etc. The underlying philosophy of this approach is that a discipline should not be studied in isolation but in relation to other correlated disciplines. For instance, a student of History is required to be aware of political movements, social and economic developments, cultural background etc., in order to have an in-depth understanding of the field. Similarly, for a student of Literature, it is important to have a knowledge of the socio-political movements, the intellectual thought of the period concerned, the literary movements, etc. Needless to say, for a student of Linguistics, a basic knowledge of mathematical logic, philosophy, psychology, anthropology, sociology, etc., will prove immensely helpful in providing him with greater insights into language studies.

It has to be noted that this approach has given rise to subjects like Socio-economics, Political Philosophy, Biophysics, Biochemistry, Linguo-cultural studies, etc.

The teaching of foreign languages in our country has no doubt reached a stage where it is relevant to explore the possibilities of institutionalizing the correlation of various disciplines/programmes of studies in foreign languages.

While supporting the philosophy of the interdisciplinary approach, in the context of the present paper, we would like to restrict ourselves to interdepartmental academic programmes in foreign language teaching (FLT). This we consider as the first step towards "interdisciplinarisation" in FLT in India. In the light of this, an attempt has been made here to identify the following areas where interdepartmental studies in foreign languages can be undertaken:

- M.A. and post M.A. courses;
- Courses for in-service teachers;
- Materials Production : preparation of textbooks and other aids; and
- Motivational studies.

The general thinking that foreign languages have individual identities has led us to consider the teaching of these languages as independent and mutually exclusive units. This view holds good with regard to salient phonological, prosodic, morpho-syntactic and semantic differences. It would however be false to characterize them as mutually unintelligible, if we take into account the organization of existing teaching programmes in terms of theoretical components of any FLT course. In spite of the variety of FLT programmes, the theoretical components of these courses have a unifying factor.

We would like to state that with regard to the teaching of foreign languages in India, interdepartmental programmes should precede interdisciplinary studies. In our opinion these programmes are possible with reference to certain areas of FLT courses, as already pointed out.

At this point, it may be appropriate to ask certain pertinent questions:

- Why should such an approach be advocated at all ?
- What are the areas that can be identified as useful for such an approach?

As in all fields of activity, the ultimate objective of our teaching programmes should be so geared as to ensure profession-oriented training (POT). The need for profession-oriented training, though not entirely new, has not yet been adequately defined. A pre-requisite for POT is training in result-oriented skills and the management of these skills appropriate to professional demands. Such a skill is the resultant experience of an integrated approach incorporating in itself diverse components.

In the field of language teaching too, teaching programmes should be oriented towards teaching skills by planning mutually related pedagogical activities.

For example, if a learner of French/Russian is given a broad-based exposure to different points of view on a particular component of his programme like the Methodology of Teaching that encompasses the main trends in the Teaching of English, German, French, Russian, Arabic etc., the learner will have a broader perspective as a language performer who will be func-

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Central Institute of English and Foreign Languages, Hyderabad.

tionally more skilled than the one exposed to monoteaching practices.

Such an approach is intended to give a comprehensive view and review of the subject, and will present as exhaustive an account as possible of theories, methods and empirical findings. Teaching programmes based on an interdepartmental approach serve, therefore, as a reference base for rapid advances in research undertaken from a variety of theoretical standpoints culminating in the "sensitization" of learners.

Teaching a foreign language today is a highly demanding task which cannot ignore progress being made elsewhere in the same field. Moreover, present-day teaching programmes should be so designed as to prepare the learner to undertake interdisciplinary studies on his own. The comprehensive nature of the programmes should help stimulate and initiate him at the learning stage itself to go on to research later. The programmes so conceived will be promising avenues of academic enquiry.

II

Keeping in view the why of interdepartmental studies we propose a dual system, which envisages a distinction between generic or core courses and specific courses. Generic courses are those courses which can be common to the study of all FLT programmes and specific courses are those which are pertinent to a particular language.

The following courses could be singled out as generic courses :

- General Linguistics
- Phonetics
- Approaches to Literary theories
- Methodology of Teaching
- Testing and Evaluation
- Methodology of Translation
- Linguo-cultural studies
- Principles of Comparative Studies (Phonology, Morphology, Syntax, Literature).

The main objective of the core courses is that the expertise available in a particular discipline can be pooled for better course organisation. For example, General Linguistics is a major course component offered by different foreign language departments. Each department runs its own courses in this area. It is felt that a common programme shared by experts in Linguistics from different departments, will be academically more relevant in view of the fact that available human resources are better utilised for the benefit of learners in different languages.

The core courses aim at providing a theoretical base, whereas the specific courses are centred on a particular language. For example, a course on General Phonetics will deal with the articulatory system, speech mechanism, phonetic processes, etc., whereas a specific course on the Phonology of French, Russian, German, etc. will exclusively deal with the Phonology of French, Russian, German, etc. Thus, as pointed out, items dealing with language specifics will be dealt with in detail under what has been termed specific courses.

It is also hoped that the dual system will have the objective of correcting certain congnizable lacunae in the classroom handling of courses. It is common knowledge that learners are often critical of the manner in which a course is taught. The thought is often voiced that a particular discipline has been dealt with by a particular department in such a way that it ensures a greater degree of satisfaction for the learners of that department, whereas the same discipline has been rather ineptly handled by other departments.

The dual system being advocated will enhance the degree of achievement of the learners of different departments in that a particular department can avail itself of the expertise available in foreign languages. This will also ensure visibility of our own performance.

Moreover, foreign language teachers will have the possibility of exchanging views in an area, the semblance of which does not happen very often. This will also bring teachers together socio-professionally in the larger interests of national integration.

We would also like to emphasize the fact that the dual system need not be confined only to full-time courses, but can also be applied to short-term need-based courses like Refresher Courses, Seminars, Symposia and Workshops, where the main thrust of the objectives, irrespective of a given language, is to improve the standards of teaching foreign languages and their literatures. Such an approach inviting active collaborative participation will help create greater commitment and involvement on the part of the academic community at large.

Another area where the interdepartmental approach will be pedagogically useful can be that of Didactics and Materials production. Didactics, which is the meeting place of disciplines like Linguistics, Psychology, Sociology, Pedagogy, etc., is a field where the locally available resources are yet to be exploited for the service of FLT in our country.

The same can be said of Materials production. Though instances where initiatives in producing materials and auxiliary aids are not lacking, such efforts on the part of course designers are not diffused adequately. For example, there have been initiatives to prepare a manual of Russian for beginners, a manual of French and so on. But these efforts are isolated attempts.

We also use textbooks/supplementary materials produced elsewhere, each based on certain methodological principles of language teaching and learning. We are not generally aware of the theoretical base of materials produced in other languages as we are prisoners of a tendency restricting ourselves only to the material—the textbook—meant for teaching a given language.

At this point we would like to observe that a course for beginners in any language has fundamentally identical objectives. Broadly speaking, what is different in the context of Materials production is the structuro-semantic component of these courses. We also know that the thematic/situational components of these courses reflect more or less similar themes/situations/activities.

We, therefore, propose that a systematic analysis of materials prepared in different languages be undertaken. This analysis will provide the shift of focus from "books *per se*" to their internal differentiations, their foundations and functions within the total methodological context of Linguistics, Psychology, Sociology, Pedagogy.

The analysis should also help:

- define a set of methodological guidelines which can be considered universal and which serve as a model for producing materials; and
- spell out ways and means of designing a particular course suited to a particular need.

Our idea is that common strategies of materials production for identifying the common structure/pattern of all the basic courses in Foreign Languages be explored.

Another important area where foreign language teachers could have come together is that of motivational studies. There have been sincere efforts in this direction by Bhatnagar, Doctor and others. But the scope of these studies was limited.

It is proposed that in order to find out well-defined possibilities for interdisciplinary studies in FLT at the university level, a national motivational survey of the students who opt for foreign languages should be undertaken with special reference to the needs and motivations of students coming from different social strata. It should provide empirical data for the evaluation of prevalent conditions of FLT at different Indian Universities, on the basis of which concrete changes in the conventional pattern of FLT can be introduced. The University Grants Commission could consider constituting a group of experts including a Psychologist, a Psycholinguist, a Sociologist together with foreign language teachers to devise a relevant questionnaire in this connection. This survey project should also try to locate the main obstacles and impediments in the teaching/learning of foreign languages.

These are only tentative proposals that need further examination in the light of the perspectives and problems of interdisciplinary studies in FLT in India. □

INSTITUTE OF ENGINEERING & TECHNOLOGY, LUCKNOW
Campus : Sitapur Road, Lucknow-226020.

Addendum to Advertisement No. 1/86
(Published on 16-8-86)

The following additional posts are to be included in the posts advertised earlier:

Professor: 2 additional posts (one each in Computer Science and Electrical Engineering).

Assistant Professor: 2 additional posts (one each in Physics and Chemistry): Qualifications as per U.G.C. norms.

Lecturer : 1 additional post in Humanities (Economics specialization): Qualifications as per U.G.C. norms.

Other details remain unaltered. Last date for the above 5 posts is 25th September, 1986.

Last date for posts at Sl. No. 1 to 3 in Advertisement No. 1/86 is now extended to 25th September, 1986. Those, who had applied against our Advertisement No. 1/85 of June/July, 1985 must apply again, if they are still interested for the posts.

Dr. Suresh Chandra
DIRECTOR

PHI

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The Challenge of Change

Dr. C.K.N. Patel, Executive Director, A.T. & T., Bell Laboratories, U.S.A. delivered a very thought provoking address at the 24th Convocation of the Indian Institute of Technology, Bombay on 8 August, 1986.

Excerpts from Dr. Patel's address are reproduced below.

Convocation

I wish to talk about the technological change that we have seen in our own lifetimes and where there still is ample headroom for you to carry forward the revolution. Of course, it is easy to sit back, contemplate, and even talk about these changes. But our society expects something different from the scientists and engineers. As scientists and engineers we are expected to provide the driving force behind the accelerating technological change. We are not expected to believe that all the progress that is to be made has already been made. We are expected to look for new horizons to conquer and new boundaries to cross. Our education and training makes us ideally suited to take up the challenge of change.

Let us look at some of the technologies that have shaped our present and will continue to have major impact on the future. The first one is transportation. In a very short time period of a few lifetimes, when the entire history of mankind is some 1000 lifetimes long, the sustainable speed of transportation has gone up by about three orders of magnitude. Starting with the horse as a mode of rapid transport where the sustainable speed was about 20 mph we have come to take for granted sustainable speeds of excess of 25,000 mph The impact of the rapid increase in the speed of travel is a change in perception of what the world is — it has been akin to growing up. To a child, the world is himself or herself. This world gradually expands to include the mother, the father, siblings, relatives, and eventually the village or town in which one lives. But at 20 mph this was about the maximum range of interaction. With the increase in the speed of movement there has come a rapid increase in the size of world with which an individual associates, and with that has come the perception of an ever shrinking world. Today with jet travel on the SST, I can have breakfast in London, leave on SST, and arrive in New York before breakfast time on the same day ! However, there is a clearly defined limit to which the increase in transportation speed can be extended. This is the velocity of light—approximately half a billion miles per hour. Therefore, we have a little over four orders of magnitude of improvement left. But perhaps we should not worry so much about moving bodies since humanity includes body and knowledge.

This brings me to the area of moving information, i.e., communications. It is in this field and next one which is computation where the impact of technology has been the most spectacular. In communications, the bandwidth of information transmission over long distances, that is distances greater than the canonical shouting distance, has gone up from a few bits per second just a hundred years ago to that in excess of 20 billion bits per second. This nine orders of magnitude increase has been brought about by the twin technologies of electronics and lightwave which rest on two key inventions — the transistor and the laser, and on one key development — that of low loss optical fibers. Twenty billion bits per second is an awesome capability - it corresponds to more than half a million simultaneous digital telephone conversations on a single optical fiber. Imagine the reduction in cost and improvement in communications we expect to see in the next few years! However, the important thing is not just that we can talk, but we may be able to communicate also. Just as the improvements in transportation technology have shrunk down the world for physical purposes, the lightwave communication is shrinking the time scale for propagation of ideas. I can think up a complex idea, instantly (but not necessarily without some cost) communicate it to my colleagues clear across the globe, and get an immediate feedback. This instantaneous dissemination of ideas has positive as well as negative aspects. A positive aspect includes rapid critical evaluation of immature ideas, while a negative aspect includes the instantaneous and wide circulation of bad ideas. This is where your responsibility comes in. We have to make it meaningful for the overall good of the society.

Again, let us look at the technological limits to communication bandwidths of a single channel. The limit is clearly set by the Heisenberg uncertainty principle which for lightwave communication put the capacity of single optical fibers at more than 100 tera bits per second. There is still a headroom of over four orders of magnitude. And because of the small size of the optical fibers hundreds of these fibers can be bundled up in a small cable, giving us almost a million fold potential improvement to work for. My advice to you is go for it !

If the technological progress in information transmission has been enough to make one feel giddy, consider what science and technology has done to the field of computation. The idiot savants notwithstanding, less than 50 years ago, our ability to carry out high precision floating point calculations was limited to perhaps one per second. These are called floating point operations/second or FLOPS. Now we can carry out computation at a rate of 50 mega FLOPS. It is well to remind ourselves about the usefulness of 20 seconds of this computational capability, that is of a billion FLOPS. It is perhaps one night's math homework for a high school final year student, or analysis of one second's worth of speech, or analysis of 1/1000 of a weather prediction. In other words a billion FLOPS, do not buy very much ! But then the game is not played out. Unlike the limits of velocity of light for transportation, or Heisenberg uncertainty for communications per channel, there is no known limit to computation. Will it not be truly to the good of the mankind if speech recognition and video analysis can be done in real time so that the current generation of dumb, blind and deaf robots can become true extensions of human mechanical effort ?

Again looking towards the future, it is not unreasonable to expect an intrusion of optics into computing where electronics has been the traditional driver. With the massive parallel architecture inherent in optical computing your generation will surely experience a next breakthrough in computing capability. And beyond the traditional computing, we now have a new kid on the block—neural architecture where we are now learning lessons from biological brain for information storage and logic. Those of you who are computer scientists and electrical engineers will experience truly exciting times.

I have chosen these three examples in order to show you the need for continual renewal of your tools if you want to continue to remain productive for a long period of time as scientists and engineers. I could have chosen any number of other fields in which the pace of progress has been sizzling and the resultant progress dazzling. Consider for example, biotechnology which in a short time period of thirty-three years since unravelling the mystery of the double helix in 1953, promises or threatens to unveil every secret of our being. Agricultural technology is another such example which has allowed India to become self-sufficient in food-stuffs in a short period of thirty years. And what about technology and science of mass production with the associated advances in automation and robots which promises to make advanced technological goods and services available to masses at affordable prices without sacrificing quality or functionality. All of these technologies are relevant to India, but none more than communications and computers and their underlying electronics base. But so much about details of technology, from where we have come, where we are, and where you and your generation can take us. What is more important in all of this is for us to continue to ask the question—where does a given technology fit, how does it impact upon a given society, where does science contribute, what is its relationship with mankind. In other words, there is a tremendous need for individuals to be more than

UNIVERSITY NEWS

A Special Number on
DISTANCE EDUCATION

8 November 1986 issue of University News will be a Special Number to mark the National Conference on Distance Education being organised on the occasion of the 61st Annual Meeting of the Association of Indian Universities at Gujarat University, Ahmedabad from 9-11 November, 1986. Contributions in the form of articles/reports/reviews are solicited on any one of the following aspects of Distance Education :

Concepts of Distance Education; Forms of Distance Education; Course Designing and Preparation; Role of Media in Distance Education; Economics of Distance Education; Student Support Services; Evaluation Methodology; and Case Studies, etc.

Articles of 2000-2500 words should be typewritten on one side of quarto sized paper in double spacing. Only original articles that have not been published elsewhere need be submitted. Contributions should reach the Editor latest by 30 September, 1986.

experts in their narrow fields of endeavour. You need to develop, what I call, peripheral vision which allows one to appreciate connections and make and gauge impact of a given advance. This kind of thinking, often called systems approach, is going to be increasingly important if we are to reach for a global optimum in society rather than seek local optimum brought about by different isolated technologies. And finally the connection with markets, whether they be for ideas, goods, or services, cannot be ignored because in real life customer is the king. You need to ask questions not only concerning how, but more importantly about why. To be really useful, a technology has to go beyond the being the best one available. Ask questions about where does the technology go, and how does it fit into the over all scheme of ultimate production of affordable goods and services. Where does this lead to ? It brings me back to what I mentioned earlier in my talk. The only stable aspect of the modern technological world is the continual change. To be leaders in such a world one needs to be learning all the time. Therefore, your time of learning has not ended with this convocation. It has just begun. I do not have to cite to you the myriads of studies which have repeatedly shown that the average half life of a new technology is about five years. And this has certainly been true in the 25 years of my association with science and technology. In order to stay abreast of changing sophistication and concepts you must run hard. To be ahead of the pack you must fly.

It is clearly valuable, I should say necessary, to be a problem solver. But that is the least I expect of a technologist. I expect more, much more. You need to be problem finders. And this takes imagination and entrepreneurship. It requires the peripheral vision I mentioned earlier, but it also requires an inquisitive approach to life. There is a constant need to ask what if ? Even in a resource constrained environment, real progress is often thwarted by limitations of imagination — imagination not only about what to do next, but about why do it, and how to get it done.

The technologists have a set of shared values with which we live and without which we cannot expect to have any impact. These are: constant search for excellence; hard work; focus on implications; integrity; comradery; and a social conscience. I am taking for granted the necessary intelligence and tools. □

ASSOCIATION OF INDIAN UNIVERSITIES

AIU House, 16 Kotla Marg, New Delhi-110002

Applications from Indian citizens are invited for the following posts in the prescribed forms available on payment of Rs. 2/- from the office of the Association.

1. **Dy. Secretary (Admn.) : Scale of Pay Rs. 1500-2000 : One**

Post Graduate with 1st class or high second class degree with at least ten years experience in an administrative post at executive level in University/Government Department/Autonomous Organisation. Persons having Diploma/Degree in Personnel Management and knowledge of administrative rules and understanding of issues in university system will be preferred.

2. **Research Officer : Scale of Pay Rs. 1100-1600 : One**

Essential : A first class postgraduate in Sciences, Mathematics or Statistics with at least five years experience of research in the area of examinations in Colleges/Universities.

Desirable : Good knowledge of computer applications with experience in computerisation of examination work.

3. **Section Officer : Scale of Pay Rs. 700-1300 : One**

Graduate with at least seven years experience as sales executive in a publishing house of repute. Candidates having Master's Degree/Diploma in Sales Management/Publishing/Personnel Management and knowledge of accounts will be preferred.

Persons already working in Universities/Colleges can be considered for deputation terms.

All posts carry dearness and other allowances generally at the Central Govt. rates. Relaxation in any of the requirements may be made in exceptional cases. The Association reserves the right not to fill up any of the vacancies advertised if the circumstances so warrant. SC/ST/Ex-servicemen will be given preference. Canvassing in any form by or on behalf of a candidate will be a disqualification.

Applications complete in all respects should reach the office by **30th September 1986.** Persons already in service may apply through proper channel. Applications received after the last date or without complete information may not be entertained.

CALENDAR OF EVENTS

Proposed Dates of the Event	Title	Objective	Name of the Organising Department	Name of the Organising Secretary/Officer to be contacted
September, 13-15, 1986	National Solar Engery Convention 1986	To evaluate the current status and trends in solar energy studies; to evolve methodology for collaboration among researchers and industrialists; and to identify technologies for harnessing renewable energy sources.	School of Environment and Natural Resources, Madurai Kamaraj University, Madurai	Prof. T. M. Haridasan, Organising Secretary, National Solar Energy Convention—1986 School of Energy, Environment and National Resources, Madurai Kamaraj University, Madurai
September, 14-16, 1986	National Seminar on Futurology	To identify future events, new ideas and approaches for growth and socio-economic development.	Kanoria Mahila Mahavidyalaya, Jaipur in collaboration with the Department of Science and Technology, Govt. of India	Dr. Shanta Mehtani, Head, Department of Philosophy, Kanoria Mahila Mahavidyalaya, Jaipur.
September, 19-20, 1986	National Policy on University Libraries	To have exchange of views among the University Librarians on various facets of the seminar	Osmania University Library, Hyderabad.	Shri N.B. Inamdar, Seminar Director & Librarian, Osmania University, Hyderabad.
October 1-4, 1986	Third National Conference on Women's Studies	To promote the development of Women's Studies in India by providing a forum for interaction amongst individuals, institutions and organisations engaged in teaching, research or action for women's development.	Indian Association for Women's Studies, New Delhi in collaboration with Panjab University, Chandigarh	Dr. Lucy Jacob, General Secretary, IAWS, L-3-D, University Campus, Jaipur
October 5-7 1986	International Seminar on Gandhi and Contemporary Ideologies regarding Freedom, Peace and Equality.	To evaluate the Contemporary Ideologies regarding Freedom, Peace and Equality in the context of Gandhiji's Contribution.	Institute of Gandhian Thought and Peace Studies, Allahabad University in collaboration with the Indian Society for Gandhian Studies.	Dr. J.S. Mathur, Director and Dr. O.N. Srivastava, Associate Director, Gandhi Bhawan, Allahabad University, Allahabad.
November 9-10, 1986	National Conference on Distance Education	Topics proposed to be covered are: (i) Concept of Distance Education; (ii) Forms of Distance Education; (iii) Course Designing and Preparations; (iv) Role of Media in Distance Education; (v) Financing of Distance Education; (vi) Student Support Services; (vii) Evaluation Methodology.	Association of Indian Universities, New Delhi; Indira Gandhi National Open University, New Delhi; and Gujarat University, Ahmedabad	Prof. B. N. Koul, Indira Gandhi National Open University, K-76, Hauz Khas, New Delhi. Mr. M.M. Ansari, Project Director (Research), Association of Indian Universities, 16 Kotla Marg, New Delhi
December 15-17, 1986	Indian Geotechnical Conference—1986	Designed to seek a consensus on questions of current significance in geotechnical engineering relevant to the Indian context.	Indian Geotechnical Society—Delhi Chapter	Prof. Shashi K. Gulhati, Organising Secretary, IGC-86, Civil Engineering Department, Indian Institute of Technology, New Delhi.

Indira Gandhi Centre for National Integration

Indira Gandhi Centre for National Integration at Visva Bharati which was formally inaugurated by the Prime Minister, Rajiv Gandhi on 5th December, 1985 has drawn up the following programme for its development.

(a) Research and Teaching Staff of the Centre will cater to:

- (i) guiding research work related to the theme of national integration; and
- (ii) conducting courses in national integration for the benefit of teachers, youth leaders, students, social workers, government employees and others.

(b) Dissemination of the theme of national integration through lectures, posters, charts, booklets, translations, etc.

(c) A cultural troupe which will stage songs, dances, plays, etc. on the theme of national integration in different parts of the country. Themes will be chosen from works. There will be a staff of performing artists, music and dance teachers and other adequate staff to take charge of travel and management of programmes.

(d) A film studio is proposed which will prepare short and inexpensive documentaries as well as feature films on the theme of national integration.

(e) Provision will be made for one scholar from each Indian State to come to the Centre for one year and work on a chosen field of investigation. These scholars will live in the same hostel and participate in a collective life, using a common dining room and organising group discussions.

(f) It is also proposed to bring out one journal which would be multilingual and would provide translations into several languages of stories, poems, essays, novels, etc. which are conducive to national integration.

(g) It is intended to encourage investigative research involving field visits and surveys as also data collection—all focussed on the theme of national integration. Field investigators will undertake selected topics of research, make on-the-spot enquiries, interview people, collect data, search records and prepare reports and recommendations which would be submitted to the State Governments and the Government of India for their use.

(h) Finally, the Centre will also organise seminars, conferences, workshops and cultural meets on the theme of national integration from time to time. It is also proposed to seek collaboration with such bodies as Zonal Cultural Centres, National Centre for Agro-Economic Research and Rural Development, ICSSR, ICPR, ICHR, UGC, Department of Culture, INSA, Asiatic Socity and other learned bodies for this purpose.

Computer Centre for North Eastern Region

A Computer Centre has been set up by the Assam Science Society at its Institute of Advanced Study in Science and Technology at Khanapara. Installed with the financial support from the Department of Electronics, Govt. of India, and the State Department of of Education, Science and Technology, the Centre aims at providing computer training to school, college and university students. It would also help in promoting development of electronics, data processing in different fields of research, industry and technology of the entire north-east region.

Postgraduate Course in Orthopaedics

The Assam Govt. is reported to have decided to introduce postgraduate course in Orthopaedics in the Assam Medical College, Dibrugarh and the Guwahati Medical College, Guwahati effective 1987. This was revealed by the Director of Health Services in Guwahati recently.

Educational Technology in Higher Education

The Indian Association for Educational Technology (IAET), in collaboration with Miranda House (University of Delhi), proposes to organise a National Conference on Educational Technology in Higher Education in New Delhi from December 5-6, 1986. The topics to be discussed at this Conference include (i) Conceptual dimensions of educational technology in higher education; (ii) the issues related to software preparation, production, distribution and relevance; and (iii) agenda for action in future.

Teachers from universities and colleges from all over the country are expected to participate in the deliberations of the conference. Dr. T.S. Rukmani, Principal, Miranda House, University of Delhi, Delhi would be the Organising Secretary of the Conference and further enquiries with regard to submission of papers, etc. may be addressed to her.

We Congratulate...

Prof. D.K. Sinha who has taken over as Director of the Indian School of Mines, Dhanbad with effect from 25 August, 1986.

M.I.T. students design Go-kart

A group of seven final year students of the Mechanical Engineering Department of Manipal Institute of Technology, under the guidance of Shri H.K.V. Rao of the same department, have successfully completed a project work on "GOKART" in partial fulfilment of their curriculum.

A "Go-kart", as the name suggests, is a highly simplified version of a four-wheeler automobile, but one which goes. It is powered by a 6.3 H.P. Bajaj scooter engine with no body, differential or suspension and with only a simple steering mechanism. It can reach a maximum speed of about 40 km/hour and can run for about 25 kms. on one litre of petrol carrying two people. Excepting the engine, tyres and a few other minor parts, all the fabrication work was done at M.I.T. workshop.

The "Go-kart" has a low centre of gravity and is very stable. It is a thrilling experience to travel in it just inches above the road surface. It is popular with young people with a sense of adventure and for racing.

BHEL Chair at IIT, Delhi

The Bharat Heavy Electricals Limited is reported to have instituted a Chair at the Indian Institute of Technology, New Delhi, to promote research in the field of thermal power station engineering in institutes of technology.

News from Agril. Varsities

Bacterial Wilt and Brinjal Hybrids

The College of Agriculture, Vellayani of the Kerala Agricultural University, has recently conducted studies on evaluation of intervarietal hybrids of brinjal for yield and resistance to bacterial wilt.

Eleven varieties collected from different sources were screened artificially for wilt resistance. Three resistant varieties (SM-6, SMI-10 & PPC) and three susceptible commercial varieties (BB, PPL and PPR) with good fruit characters were chosen for hybridization. Nine hybrid combinations were produced by crossing each of the resistant varieties as female parent with all three susceptible varieties. The nine hybrids and six parents were screened artificially for wilt resistance. They were also evaluated for field performance in an RBD with three replications.

The results of the study show that the hybrids possessed field resistance to bacterial wilt and were on par with the resistant parents. This makes the hybrids suitable for cultivation in wilt endemic areas. As far as the yielding ability was concerned, the hybrids greatly out-yielded the parents during the short term period as well on the entire growth period of the crop. The hybrids had fruits of medium weight and volume, but produced more number of fruits than the parents. The hybrids also exhibited marked vigour for number of primary branches and plant height. However none of the hybrids were earlier than their early parent. All the hybrids had an extended fruiting period and then contributed much to their higher yields. Unlike the parents, the hybrids produced considerable quantity of fruits during the second cycle of flowering also. The susceptibile parents gave very low fruit yields due to wilt infection. The fruits of the hybrids were medium dense, and weight/volume ratio ranging from 0.34 to 0.50 as againt 0.51 in PPC.

The hybrid SMI-10 × PPL was the highest yielder during the short terms period. This can be recommended for commercial cultivation in wilt endemic areas. For homestead cultivation in wilt prone areas, the hybrid SM-6 × PPC appears to be promising because it gives the highest yield in the two cycles of flowering taken together.

The study has thus revealed the scope for combining high yield with resistance to wilt in brinjal by crossing resistant varieties to susceptible commercial varieties.

Awards & Medals

INSA Medal for Young Scientists

The Indian National Science Academy (INSA) has selected 15 scientists for the award of "INSA Medal for Young Scientists for the year 1986" in recognition of their contributions in the field of Science and Technology. The recipients of the awards are:

Dr. Biman Bagchi, Lecturer, Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore; Dr. Amarjit Singh Basra, Assistant Professor, Department of Botany, Punjab Agricultural University, Ludhiana; Dr. Kamal Bhattacharyya, Lecturer, Department of Chemistry, University of Burdwan, Burdwan; Dr. K.V.R. Chary, Scientific Officer, Tata Institute of Fundamental Research, Bombay; Dr. Jayaraman Gowrishankar, Scientist 'C', Centre for Cellular & Molecular Biology, R.R.L., Hyderabad; Dr. Dipankar Home, Theoretical Nuclear Physics Division, Saha Institute of Nuclear Physics, Calcutta; Dr. S.K. Koul, Centre for Applied Research in Electronics, Indian Institute of Technology, New Delhi; Dr. Ravi Mehrotra, Scientist 'C', National Physical Laboratory, New Delhi; Shri B. Mishra, Senior Research Fellow, Department of Geology & Geophysics, Indian Institute of Technology, Kharagpur; Dr. E.V. Sampathkumaran, Solid State Physics Group, Tata Institute of Fundamental Research, Bombay; Dr. J.A. Sekhar. Scientist 'C', Defence Metallurgical Research Laboratory, Hyderabad; Dr. Y. Chandra Sekharudu, Molecular Biophysics Unit, Indian Institute of Science, Bangalore; Dr. A. Sharma, Department of Physics, Indian Institute of Technology, New Delhi; Dr. R.S. Upadhyay, Lecturer in Botany. Centre of Advanced Study in Botany, Banaras Hindu University, Varanasi; and Dr. (Miss) Chandrika Varadachari, 7A Judges Court Road, "RATNABALI" Calcutta.

The award carries a cash prize of Rs. 5,000 and a medal with a provision of research grant of Rs. 20,000 per year including a stipend for a Junior Research Fellow, for a period of three years for continuing research work, in the field of their specialisation if the research proposal is approved by the Academy for such support after assessment.

These awards will be presented it the 74th Session of the Indian cience Congress to be held at Bangalore in January 1987.

Educational Technology Awards

To encourage professional actiities in educational technology and lso to accord recognition to such works, the Indian Association for Educational Technology has instituted three annual awards, one each for research in educational technology, educational software, and application of educational technology in teaching/training. The awards will be made on a particular piece of work i.e. a research study; a software package or an experiment.

S.S. Bhatnagar Award

The Shanti Swarup Bhatnagar Medal for the year 1985 has been awarded to Prof. Roddam Narasimha, Director, National Aeronautical Laboratory, Bangalore for his contributions in the field of fluid mechanics.

AIU News

Inter-Varsity Youth Festivals 1986

International Youth Year 1985 was celebrated with great gusto the world over by organising youth festivals, conferences, seminars, exhibitions and other youth activities. The Association of Indian Universities (AIU), with financial support from Depatment of Youth Affairs and Sports, Govt. of India, also launched a cultural bonanza by organising Inter-University Zonal and NAM Cultural Youth Festivals (NAMYFEST) during September-November 1985. NAMYFEST was inaugurated by Prime Minister Rajiv Gandhi on November 6, 1985 at the Talkatora Stadium, New Delhi in the presence of a distinguished audience, including delegates from the Indian Universities as well as universities of 33 NAM countries.

In 1986, AIU will again organise the Inter-University Youth Festivals, with the financial assistance from the Department of Youth Affairs and Sports, Govt. of India. The universities in the country have been divided into four Zones—North, South, East and West. At each of the Zonal Youth Festivals, about 25-30 universities of the zone are expected to participate. Selected performers from Zonal Festivals will be invited to the National Youth Festival, which is likely to be inaugurated by the Prime Minister.

The venues and dates of the 1986 Youth Festivals are :

Zone	Host University	Dates
North	G.B. Pant University of Agriculture and Technology, Pantnagar, U.P.	Sept. 20-23, 1986
South	Andhra University, Waltair	October 2-5, 1986
East	Gauhati University, Guwahati	October 18-21, 1986
West	University of Rajasthan, Jaipur	October 27-30, 1986
National	Annamalai University, Annamalainagar	To be announced

Further details can be had from the Cultural Officer, Association of Indian Universities, AIU House, 16 Kotla Marg, New Delhi-110002.

News from Abroad

Archaeometallurgy of India

A Bonn University research team has undertaken a project entitled 'The Archaeometallurgy of India' with the objective of examining the prehistoric origins of the country's metal industry between the second and third millenium B.C.

Sponsored by the German Scientific Research Society (DFG), the project is led by Prof. Dr. Klaus Fischer, Head of the Department of the History of Oriental Art, University of Bonn in co-operation with Prof. Dr. T.S. Maxwell and Dr. P. Yule and concentrates on the central and eastern parts of India in its examination of typical metal artifacts and other finds so as to provide enough information on the state of the first metal age in India.

In collaboration with the archaeological department of the State of Orissa, the team has already had some success in excavating significant and numerous prehistoric weapons, hand-tools, jewellery and other artifacts indicative of the age. Besides, the effort has also provided a rare opportunity for the researchers to document the "chalcolithic ossuary" containing the remains of the dead, in this region.

The Bonn team's approach marks a departure from the normal archaeological expeditions inasmuch as the normal focus of prehistoric studies hitherto has been in Europe and the Mediterranean region on the basis of what has come to be known as "suitcase archaeology" reflecting a rigid and conventional approach in tracing such finds. The archaeological strategies in research into prehistoric remains has also focussed on the Harappan civilisation that thrived between the Indus and the Jamuna in ancient times. As a result of the present discoveries, here will be a systematic collation of data and visual information throwing light on the origins of the raw materials in vogue in those times.

Initial progress in the interiors of Madhya Pradesh, Orissa and Bihar, among others, has disclosed very valuable finds and a minute examination of typical metal artifacts from different copper-producing regions is expected to yield important data as a result of metallurgical tests with modern methods.

In particular, the region of Sankarganj in Orissa has yielded the greater part of the discoveries in the form of copper tools, bracelets, stone axes, stone pearls, human skeletal remains and others in one spot. The condition and collection thereof point to the existence of a prosperous metal working industry in India in those times.

Pakistan Academy of Medical Sciences

Pakistan is reported to have set up an Academy of Medical Sciences for the advancement of medical sciences and arts in the country. Named as Pakistan Academy of Medical Sciences (PAMS), it will have its headquarters at the Department of Physiology and Pharmacology, University of Agriculture, Faisalabad with branch offices at Karachi and at Norton, Virginia (USA).

The main objectives of the Academy include recognition of meritorious and scholarly achievements of the persons of Pakistani background in the sciences and the arts of medicine and biomedical sciences; creation of an organisation to bring about contact and co-operation among scholarly professionals of Pakistani background for a mutual exchange of ideas for the progress of imedical sciences and arts; promulgation and preservation of the contributions of Pakistani scholars to medicine and biomedical sciences, co-operation with other scientific, charitable, Governmental and academic organisations in the interest of improving the medical education and health care in Pakistan in particular and in the world in general and to assist organisations and individuals in their medical, scientific research and literary programmes.

Dr. Mohammad Shoaib Akhtar, a distinguished medical scientist, has been named as Secretary of Academy.

CORRESPONDENCE COURSE IN EVALUATION METHODOLOGY AND EXAMINATIONS

Applications are invited from College/University teachers for admission to Correspondence Courses in Evaluation Methodology and Examinations at Basic Level, Intermediate Level and Advanced Level/Special Professional Course. The duration of each of the three courses is six months. A personal 'Contact Programme' for three days is planned for each of the three courses. Universities/Institutions sponsoring candidates can meet the registration/course fees from out of unassigned grants by UGC.

Request for prospectus and application form accompanied by a crossed Indian Postal Order for Rs. 10/- drawn in favour of the Secretary, Association of Indian Universities and a self addressed stamped envelope (Re.1/-) should reach the undersigned. Last date for receipt of applications is **15th September** for non-sponsored and **26th September, 1986** for sponsored candidates.

Project Director (Examinations)
Association of Indian Universities
AIU House, 16 Kotla Marg
New Delhi-110002

AIU Library

Established in 1965, the AIU Library has acquired over the years a valuable collection of books and documents on Higher Education. Among the topics prominently represented are Educational Sociology, Educational Planning, Educational Administration, Teaching & Teachers' Training, Examinations, Economics of Education and Country Studies. Developing fields of Adult Education, Continuing Education and Distance Education, and Educational Technology are also well stocked. The Library is particularly strong in its collection of reports whether they are on the setting up of different universities or on the state of Higher Education. Files of Annual Reports of different universities are also maintained. Readers are kept informed of the latest acquisitions through our column 'Additions to AIU Library'.

The Library also receives about a 100 periodical titles on Higher Education. All these are indexed regularly and a select list appears every month as 'Current Documentation in Education'.

Doctoral Degrees awarded during the preceding month are reported as 'Theses of the Month' while registrations made for such degrees are flashed as 'Research in Progress'. Bibliographies are also compiled and supplied on demand.

Research scholars and students of education are welcome to use these resources. The Library is open from 9-30 a.m. to 5-30 p.m. Monday through Friday. Access can also be had through Inter library loan for which requisition must be made through your Librarian.

ADDITIONS TO AIU LIBRARY

Atwood, Margaret and others. *Mission of the University: A symposium.* Kingston, Queen's University, 1984. iv, 91p.

Beattie, Nicholas. *Professional parents: Parent participation in four Western European countries.* London, Falmer Press, 1985. vii, 289p.

Bhardwaj, K.C. *Report on the visit to Great Britain and Canada under the scheme for Administrative Travelling Fellowship 1983.* Rohtak, Maharshi Dayanand University, 1983, 105p.

Biswas, A. and Agrawal, S.P. *Development of education in India: A historical survey of educational documents before and after independence.* Delhi, Concept, 1986. 936p.

Brent, Allen. *Philosophy and educational foundations.* Boston, Allen and Unwin, 1983. 369p.

Clarke, Ann M. and others, ed. *Mental deficiency : The changing outlook*, London, Methuen and Co. (c 1985) 834p.

Cooper, David E. ed. *Education, values and mind: Essays for R.S. Peters.* London, Routledge and Kegan Paul, 1986. v, 222p.

Dressel, Paul L. and Marcus, Dora. *On teaching and learning in college : Reemphasising the roles of learners and the disciplines.* San Francisco Jossey-Bass, 1982. xxvii, 241p.

Fenske, Robert H. and others, ed. *Handbook of student financial aid.* San Francisco, Jossey-Bass, 1983. xxix, 508p.

Goad, L.H. *Preparing teachers for lifelong education.* Oxford, Unesco Inst. for Education and Pergamon Press (c 1984) xvi, 188p.

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——————. *Problems of scheduled castes and scheduled tribes students in colleges in Gujarat State.* Ahmedabad, Author, 1977. 16p.

Gumperz, Jenny Cook, ed. *Social construction of literacy.* Cambridge, University Press (c 1986) x, 248p.

Indian Institute of Technology, Delhi. *National seminar on engineering education policy : Thematic lead papers for discussion,* 1985. Delhi, Author, 1985. 53p.

Karan Singh. *Sadar-I-Riyasat: An autobiography. V2.* 1953-1967. Delhi, Oxford University Press, 1982. xi, 168p.

Malhotra, O.P. *Tribal education in Andaman and Nicoba Islands.* Delhi, S. Chand & Co., 1986. 326p.

Manorama yearbook 1986. Kerala, Manorama Pub. House, 1986. 767p.

Martin, Warren Bryan. *College of character.* San Francisco, Jossey-Bass, 1982. 215p.

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Paris, O.E.C.D. *Handbook on curriculum development.* Paris, Author, 1975. 178p.

——————. *Teacher policies in a new context.* Paris, Author, 1979. 163p.

——————. *University and the community: The problems of changing relationships.* Paris, Author, 1982. 162p.

Ramachandran Nair, K.R. *Emerging spectrum : Essays on Indian higher education.* Bombay, Himalaya 1986. vi, 115p.

Rushby, Nick and Howe, Anne, ed. *Aspects of educational technology. V. 19. Educational training and information technologies: Economics and other realities.* London, Kogan Page, 1986. 251p.

Shivarudrappa, G. *Philosophical approach to education.* Bombay, Himalaya, 1985. v, 286p.

Sinha, Durganand. *Psychology in a third world country: The Indian experience.* Delhi, Sage, 1986. 160p.

Swatridge, Colin. *Delivering the goods: Education as cargo in Papua New Guinea.* Manchester, Manchester University Press (c 1985) 163p.

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Walker, Rob. *Doing research : A handbook for teachers.* London, Methuen (c 1985) vii, 210p.

THESES OF THE MON[illegible]

A List of Doctoral Theses Accepted by Indian Universities

HUMANITIES

Philosophy

1. Sangma, Enothsing Ch. *Traditional Garo religion in its social matrix.* Gauhati.

Religion

1. Sumanatissa, Venerable Medagoda. *A study of social and moral norms as depicted in the Vinayapitaka.* Delhi.

Fine Arts

Drawing and Painting

1. Singh, Manju. *Brij deerghchitran parampara.* Kanpur.

Dance

1. Batqbyal, Indrani. *Bharatiya nrityer punarjibane Rabindranath.* *Rabindra Bharati.*

Language and Literature

English

1. Bhattacharya, Ramkrishna. *The imagery and symbolism of gold in literature.* Calcutta.
2. Mathew, P.A. *Christian symbolism in Faulkner.* Panjab.
3. Mehreja, Gyan Devi. *A listening comprehension course in English diploma/degree students of science and technology: Rationale and model.* Panjab.
4. Raj Ranga Rao, Ramachandrapurapu. *The attitudes to love and nature of Walt Whitman and Rabindranath Tagore.* Bombay.
5. Sagare, Sarjerao Baburao. *World-view in Iris Murdoch's fiction.* Shivaji.

Russian

1. Jerath, Ritoo Malati. *Social protest in the pre-October poetry of V.V. Mayakovsky,* 1912-1917. JNU.

Sanskrit

1. Agrahari, Ram Kumar, *Vibhinn vat rogon per vrihadatchintamani ras ke upyog ka adhyayan.* KS Darbhanga.
2. Bhagawati, Ghana Kanta. *The Bhagavata Purana: A sociocultural study.* Gauhati.
3. Jha, Adiyanarayan. *Ayurved chikitsa mein grahani rog per tantra vidhan aur uska vaigyanik vivechan.* KS Darbhanga.
4. Jha, Kashinath. *Bharatiya jyotish mein kal samikaran.* KS Darbhanga.
5. Khati, Swapnagandha Sanjeev. *Abhinavguptanchya Lochan teekiye chikitsak adhyayanam.* Nagpur.
6. Mishra, Anandeshwar Prasad. *Sanskrit gadya sahitya ko Pt. Ambika Dutt Vyas kee den.* Gorakhpur.
7. Mukerji, Rudrani. *Bharatiya darsane saksir svarupa* Rabindra Bharati.
8. Pandey, Vijay Shankar. *Sri Umapati Dwivedi Kavipati kee krition ka adhyayan.* Gorakhpur.
9. Sagar, Ganga Ram. *Vedant darshan evam Radhaswami Sant ka tulnatmak adhyayan.* Kanpur.
10. Sharma, Rajendra Prasad. *Pathapathya kee vaigyanik vivechana.* KS Darbhanga.
11. Sharma, Ram Kishore. *Bharat Vijay natak kee sameeksha.* KS Darbhanga.
12. Sharma, S. *Sanskrit sahitya mein raj shastra ka sameekshatmak adhyayan.* Bihar.
13. Srinivasulu, Suram. *A critical study of hasya with reference to Sanskrit prahasana.* Andhra.
14. Tadakod, *Vadiraj Bajari Narayanacharya, Rukminisha Vijaya Mahakavyasaya kavya-shastra purana sandarabhikam sameekshanam.* Karnatak.
15. Thakur, Ambarishkumar Prasad. *Bhaktirasamrit sindhu ka kavyashastriya adhyayan.* KS Darbhanga.
16. Tiwari, Ranjan. *Sanskrit sahitya mein nirupit guru shishya parampara: Ek adhyayan.* Kanpur.
17. Verma, Shatrughn Prasad. *Vaigyanik paripreksha mein ayurvediya ras kee tulnatmak vivechana.* KS Darbhanga.

Pali

1. Gupta, Anjali. *Professor Benimadhab: The great indologist.* Calcutta.

Hindi

1. Aggarwal, Mukesh Kumar. *Khari boli ke gunvachak visheshanon ka arthparak adhyayan.* Delhi.
2. Amita Kumari. *Swatantrayottar Hindi natakon mein rangmancheeya adhyayan.* HP.
3. Jain Neelam. *Premakhayanak kaviyon kee saundarya chetna.* Dlehi.
4. Jaiswal, Aditi. *Samkaleen Hindi natya kavyon ka manovaigyanik adhyayan.* Hyderabad.
5. Kattimani, Tirakappa Venkappa. *Fiction of Mohan Rakesh and P. Lankesh: A comparative study.* Karnatak.
6. Ketkar, Kaushal, *Raja Radhika Ramana Prasad Singh kee rachnaon ka samajik evam sanskritik paksha.* Osmania.
7. Khosla, Madhuri. *Maithili Sharan Gupta ke kavya mein patron kee parikalpana.* Delhi.

8. Kundra, Balbir. *Kabir kee kavya-bhasha ka shailivaigyanik adhyayan.* Delhi.

9. Mandal, Basudeo. *Dwitiya samrothar Hindi kavita ka alochanatmak adhyayan.* Calcutta.

10. Mathur, Veena. *Upanyaskar Pratap Narayan Srivastava.* Osmania.

11. Mishra, Vijay Shankar. *Tulsi kavya mein itihas-bodh.* Delhi.

12. Nalini. *Hindi-Marathi ke sanskar-geeton ka tulnatmak adhyayan.* Osmania

13. Parikh, Narendra Maneklal. *Vishnu Prabhakar ke katha sahitya ka anusheelan.* Patel.

14. Qureshi, Abdul Shahzad. *Shamsher kee kavya chetna ka vaishishtaya tatha prayogsheelata.* Vikram.

15. Roychoudhury, Bhupendra Nath. *Comparative study of the thoughts of Sankardeva and Tulsidasa.* Gauhati.

16. Sharma, Manorama. *Sur kavya mein prem kee parikalpana: Madhyakaleen bhakti andolan ke sandarbh mein.* HP.

17. Sharma, Shashi Vardhan. *Shri Guru Bhakt Singh 'Bhakt' ke vyaktitva evam krititva ka anusheelan.* Nagpur.

18. Sharma, Usha. *Nai kahani ke shilpgat prayog.* HP.

19. Singh, Jaya. *Bharatendu evam Dwivedi yugeen bhasha chintan ke sandarbh mein Pt. Govind Narayan Mishra ke vyaktitva evam krititva ka alochanatmak anusheelan.* Kanpur.

20. Singh, Kamini. *Nirgun Bhakti sahitya mein chitrit samaj.* Kanpur.

21. Tiwari, Ramesh Prasad, *Hindi ke samajik upanyason mein vyangya ke swarup ka anusheelan,* 1950-1980. HS Gour.

22. Tripathi, Satyavati. *Adhunik natakon mein prayogdharmita.* HS Gour.

Bengali

1. Anwarul Azim. *Rabindra Kavyer adiparaba,* 1876-1890. Calcutta.

2. Basuray, Sibani. *Dwitiya Biswajudhyakalin Bangla galpo-o-upanyas.* Calcutta.

3. Bhattacharya, Pramila, *Kathashilpi Sharadindu: Mon O Shilpa.* Rabindra Bharati.

4. Chattopadhyay, Tribikram. *Kashiram Das O Bangla pouranik natak.* Rabindra Bharati.

5. Goswami, Dabakinandan. *Aitihasik O bhowgolik patabhumite Dakshin Paschim Radher loksanskriti-o-lok sahitya.* Calcutta.

6. Mukhopadhyay, Ranjit. *Unish satakar Bangla gitikabitay romantikata-paschatya probhav.* Rabindra Bharati.

7. Ray, Lipika. *Natyakar Sri Sachindranath Sengupta.* Calcutta.

Oriya

1. Mohapatra, Manorama. *A study of poetic aspects of Dr. Mayadhar Mansingh.* Utkal.

2. Sahoo, Kartikeswar. *Gopinath Mohantynkara upanyasare shilpakala.* Utkal.

Marathi

1. Telang, Vijaya Ramachandra. *Dr. D.R. Bendre: A link between Marathi and Kannada.* Karnatak.

Gujarati

1. Kapadia, Mala. *A critical study of Shri Suresh Joshi: As an essayist and poet.* SNDT.

Nepali

1. Sharma, Vishnu. *Bisheshwari Prasad Koirala ka katha ra upanyashma nari charitra.* NBU.

Malayalam

1. Gopalkrishnan, Devi. *Verb sequences in Malayalam.* JNU.

Telugu

1. Aruna Kumari, G. *Humanism and its diverse trends in modern Telugu poetry.* Hyderabad.

2. Manik Prabhu, P. *The place-names of the Medak District.* Osmania.

Geography

1. Awasthi, P.L. *Seemapur Janpad mein krishi ke parivartansheel pratiroop.* Kanpur.

2. Mukhopadhyay, Malay. *Resource planning of Purulia District of West Bengal and its impact on rural development.* Calcutta.

3. Subramanyam, M.J. *Settlement system and demographic structure of Nalgonda District.* Osmania.

History

1. Bhattacharyya, Dipankar. *Peasant movements in Bengal and Bihar,* 1937-1947. Rabindra Bharati.

2. Das, Purna Chandra. *Studies in the economic history of Orissa in the 19th century.* Utkal.

3. Dubey, Manorama. *Dashpur kshetra ka prachin rajnitik tatha sanskritik itihas.* HS Gour.

4. Dubey, Rajiv. *Mahakaushal evam Bundelkhand kee rajnitik evam samajik jagriti mein Hindi patrakarita kee bhoomika, san* 1904 *se* 1942 *tak.* HS Gour.

5. Ghosh, Mala. *A study of the Satvahana Coinage.* Calcutta.

6. Holkar, Jyotsana. *Holkar rajya kee prashasanik vyavastha, san* 1818 *tak ka swarup evam British kal mein uska vikas.* Vikram.

7. Kalsi, Harbhajan Singh. *The Indianization of the Army in India* 1921-47. HP.

8. Lohar, Manohar Appana. *Trade and commerce in Western India of 17th century.* Shivaji.

9. Mane, Ganpat Kashinath. *Dakhhanmadhyeela brihadashmyugeen sanskriti.* Nagpur.

10. Mohd. Akram Lari. *Religion and politics in India during the 17th century.* Gorakhpur.

11. Pateriya, Raghaw Raman. *Legislative Council of central Provinces and Berar and national movement,* 1921-37. HS Gour.

12. Philip Charan. *Mahatma Gandhi ka asprishyata nivaran mein yogdan,* 1920-1948 *tak.* HS Gour.

13. Roy, Shyamala Chandra Guha. *Study of some aspects of the history of Kamata Koch Bihar.* NBU.

14. Sengar, Pramod Kumar. *Growth of the English trade under the Great Mughals,* 1556-1707. Panjab.

15. Vyas, Hansa. *Prachin Malwa mein Shaiv Dharam.* Vikram.

16. Singram, Leela. *Madhya Prant evam Berar mein rajniti evam rajnaitik dal,* 1937-1947. HS Gour.

POSTGRADUATE INSTITUTE OF MEDICAL EDUCATION & RESEARCH
CHANDIGARH-160012
ADMISSION NOTICE NO. 4/86

Applications on prescribed form are invited so as to reach the undersigned by **30th September, 1986** for First Year Junior Residents (for postgraduate courses of M.D./M.S.) and for other courses mentioned below for the session commencing from 1st January, 1987:

I. **First Year Junior Residents—52**

(a) **Clinical Group — 40** Anaeshesia (3), Dermatology (1), E.N.T. (1), Medicine (12), Obst. and Gynae. (1), Paediatrics (1), Psychiatry (1), Ophthalmology (3), Orth. Surgery (2), Radio-Diagnosis (3), Radiotherapy (1) and Surgery (11).

(b) **Para clinical group — 8** Microbiology (1), Pathology (3), Pharmacology (4).

(c) **Non clinical group — 4** Biochemistry.

1. Those completing their internship after 31.12.1986 are not eligible.
2. In the clinical group, candidates can apply for a maximum of two subjects. They may apply for any number of subjects in para-clinical and non-clinical groups. However, only one application needs to be submitted. Application fee is Rs. 30/- per subject.
3. 22½% of the total seats in each of the above mentioned groups will be reserved for candidates belonging to Scheduled Castes/Tribes. In addition, 5% seats will be reserved for candidates who have served or are serving or have carried on private practice in rural areas for a minimum period of two years.
4. A limited number of sponsored/deputed candidates may also be accepted for the courses mentioned above.

II. **Ph.D. Programme.** Seats are available in departments of Anaesthesia, Biochemistry, Biophysics, Blood Transfusion, Dermatology, Cardiology, Clinical Psychology, Endocrinology, Community Medicine, Gastroenterology, Microbiology, Obst. & Gynae. Paediatrics, Parasitology, Pharmacology, Psychiatry, Virology & Surgery.

III. **M.Sc. Pharmacology.**

IV. **Diploma in Blood Transfusion and Immunohaematology.**

V. **M.Sc. Medical Technology (Pathology) with Immunopathology or Cytology or Morbid Anatomy or Haematology as one of the special subjects.**

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VII. **M.Sc. Medical Technology (Radiology) with Radio-Diagnosis or Radiotherapy as one of the special subjects.**

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General Information

1. Candidates other than those belonging to Sch. Castes/Tribes having more than one failure during their M.B., B.S. (for category I) and B.D.S. (for category VIII) career are not eligible. Sch. Castes/Tribes candidates with upto two failures in their MBBS/BDS career will be eligible.
2. Those applying for the reserved seats must supply with their applications a certificate from the Distt. Magistrate concerned in support of their claim. No other certificate will be entertained.
3. For categories IV to VII, only sponsored/deputed candidates will be considered for admission.
4. The course under category IV is under the Punjab University.
5. The application must be accompanied with non refundable fee of Rs. 30/- in the form of crossed postal order drawn in favour of the Director for each of the courses mentioned above. A candidate applying for more than one subject in case of categories II and V to VII is required to submit separate application for each subject and pay application fee @ Rs. 30/- per subject.
6. Application form and detailed information are available from the office of the undersigned either personally on payment of Rs. 5/- at the counter from 11 AM to 12 Noon and 3 PM to 4 PM on all working days or by post for which the request must be accompanied with a self addressed envelope (size 10×23 cms) bearing postage stamps of Rs. 2.50 and crossed postal order for Rs. 5/- in favour of the Director.

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CENTRAL INSTITUTE OF ENGLISH AND FOREIGN LANGUAGES

HYDERABAD-500 007

ADVERTISEMENT No. X/86

The CIEFL announces the following courses beginning 1st December, 1986.

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   The entrance qualification may be relaxed in special cases. Students who have taken PGDTA/PGDTF/PGDTG/PGDTR or equivalent qualifications may be exempted from Semester-I of the M.Litt. Course.

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   Entrance Qualification :

   Either M.A. in the language concerned at least Class II OR M.A. in the language concerned with a P.G. Diploma in the teaching of the language, at least Grade 'B' average OR an equivalent qualification.

   EXEMPTION

   A candidate with a P.G. Diploma from the Institute or an equivalent qualification may be exempted from Course work in Semester—I.

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For application form for admission/Fellowships and Prospectus, please write to the Editor, CIEFL, Hyderabad, 500007, with a crossed postal order for Rs. 6/- drawn in favour of the Registrar, CIEFL, Hyderabad-500007.

Last date for receipt of filled-in applications for all courses is **30-9-1986.**

K. Jayashankar
REGISTRAR

CLASSIFIED ADVERTISEMENTS

DR. YASHWANT SINGH PARMAR UNIVERSITY OF HORTICULTURE AND FORESTRY, SOLAN

(Recruitment Branch)

Advertisement No. 4/86

Applications on the prescribed form are invited for the following posts :

1. One Director of Extension Education *in the pay scale of Rs. 1500-2500 plus* rent free unfurnished accommodation at the headquarters of the University or in lieu thereof an allowance of Rs. 250/- per month.
2. One Scientist (Forestry) in the discipline of Tree Breeding in the scale of Rs. 1200-1900.
3. One Deputy Librarian in the scale of Rs. 1100-1600.
4. Three Assistant Scientists (One each in the discipline of Horticulture Technology, Microbiology (Rhizobium culture) and Extension Education in the scale of Rs. 700-1600.
5. One Public Relations Officer in the scale of Rs. 825-1580.

QUALIFICATIONS

1. **For Post at Sr. No. 1**
   Ph.D. Degree or its equivalent in any of the Sciences related to Agriculture, Horticulture and Animal Science; 10 years' teaching/ research/ extension education experience in a relevant field out of which at least 5 years experience should be as Professor or equivalent rank : A significant contribution or accomplishment in the field of Research Education/ Extension Education/ as evidenced by Publications; Ability to Organise, supervise and co-ordinate extension education activities in the field of Agriculture/Horticulture/Animal Husbandry / Forestry and he should preferably be conversant with the conditions and agricultural practices of Himachal Pradesh.
2. **For Post at Sr. No. 2**
   Ph.D. Degree or equivalent in the subject with consistently good academic record; four years' teaching/research extension education experience in tree improvement and significant contribution in the field as evidenced by publications.
3. **For Post at Sr. No. 3**
   1. Atleast 2nd Class Master's Degree in Library Science from a recognised University/ Institution OR M.A./M.Sc./ M.Com. 2nd Class and B. Lib. Science/ Post Graduate Diploma in Library Science.
   2. Not less than *five years' experience* as Assistant Librarian in a Library of repute and good knowledge of modern Library systems.
4. **For Posts at Sr. No. 4**
   Ph.D. Degree in the concerned or allied subject : OR M.Sc. in the concerned or allied subject and holding an equivalent post in a University or Organisation of comparable standard. **NOTE:** In case candidates with the above qualifications are not available, M.Sc. in the concerned or allied subject with consistently good academic record will be eligible.
5. **For Post at Sr. No. 5**
   Graduate with 3 years diploma in journalism and having sufficient experience.

NOTE

1. Educational qualifications relaxable in exceptional circumstances, higher pay admissible in the case of meritorious candidates.
2. Applicants already in service must send their applications through proper channel.
3. The University reserves the right not to fill up any of the post advertised.
4. Applications received after the last date fixed herein may be rejected without making any reference to the candidates. Applications on plain paper are also liable to be rejected.
5. Benefits of contributory Provident Fund-cum-Gratuity OR General Provident Fund-cum-Pension-cum-Gratuity and leave etc. as per University rules.

Applications form can be had from the Registrar, Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan-173230 by sending application fee of Rs.10/- in the shape of crossed Indian Postal Order(s) payable to the Finance Officer, Dr. Yashwant Singh Parmar University of Horticulture and Forestry. Solan-173230 alongwith self addressed envelope of size 23 x 10 cms.

Applications complete in all respect with attested copies of testimonials should reach the Registrar, Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan -173230 by **4-10-1986.**

Candidates applying from abroad may send their applications on plain paper giving particulars of date of birth, examinations passed (from High School onwards) with division and percentage of marks obtained in the various examinations, teaching/research/ extension experience with a list of publications, if any, so as to reach the Registrar, Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan-173230 by **September 18, 1986.**

Ashwani Kapur
REGISTRAR

BHARATHIDASAN UNIVERSITY
TIRUCHIRAPALLI

Applications are invited by the Registrar, Bharathidasan University, Tiruchirapalli-620 024 upto **15-9-1986** for one post of Lecturer in Physics in the scale of pay of Rs. 700-40-1100-50-1600.

Qualification

A first class or second class post-graduate in the subject with not less than 50% of marks or Grade 'B' under grading system, a Ph.D. degree in the subject with not less than 3 years of teaching and research experience.

Area of Specialisation

Biophysics condensed matter/ Chemical Physics/Statistical Physics/ Mathematical Physics/Plasma Physics.

The University reserves the right to shortlist the applicants for interview. Applications in eight copies in plain paper are to be sent with the following details.

Name of the applicant (in block letters); Present position; Address (to which communication may be sent); Community; Age and date of birth; Academic qualifications (with dates on which degrees were taken); Experience : Teaching : P.G./UG level. Research : (with publications); Distinctions/ Honours; Acceptable salary; Membership of professional academic or scientific bodies ; Any other information; References; Testimonials; Signature of the applicant.

Applicants who are in service should send their applications through their employer or they should produce a 'No objection certificate' from the employer at the time of interview.

REGISTRAR

SHIVAJI UNIVERSITY KOLHAPUR

Advertisement No. 25

Dated: 21 Aug. 1986

Applications are invited for the following posts :

1. READER : One each in (i) Music, (ii) Dramatics.
2. LECTURER : One each in (i) Music, (ii) Dramatics
3. ACCOMPANIST (Tabala) : Two posts.
4. CO-ORDINATOR/Field Organiser (Dramatics) One post. (Dramatics) one post.

Pay Scales

Reader : Rs. 1200-50-1300-60-1900.

Lecturer : Rs. 700-40-1100-50-1600.

Accompanist and Co-ordinator/ Field Organiser. } Rs. 600-40-1000-E.B.-50-1500.

Qualifications

Reader : Good academic record with a Doctoral Degree OR equivalent published work. Evidence of being actively enaged in (i) research or (ii) innovation in teaching methods or (iii) Production of Teaching Materials. About five year's experience of teaching and/or research provided that atleast three of these years were as Lecturer or in an equivalent position. This condition may be relaxed in the case of candidates with outstanding merit.

Lecturer : (a) Good academic record with at least Second Class (C in the seven point scale) Master's Degree in a relevant subject or an equivalent Degree or Diploma recognised by the University, and (b) Two years' research or Professional experience or evidence of creative work and achievement in his field of specialisation or a combined research and professional experience of three years in the field as an artist of outstanding talent OR A traditional or a professional artist with highly commendable professional achievement in the subject concerned.

Accompanist (Tabala) : (A) Tabala-Alankar OR (B) Radio approved artist in Grade "A" OR in Grade "B"-High" (C) 7 to 10 years experience as an accompanist to renowned artists.

Co-ordinator/Field Organiser : (A) Graduate of any faculty or a qualification equivalent to degree. (B) Experience in Theatre activities (Acting/ Directing/ Writing etc.) of upto 10 years (N.B. Local persons will be preferred).

Age Limit : Candidates applying for the post of Reader should be below the age of 45 years, and for the post of Lecturer should be below the age of 35 years, for the Post Accompanist/ Coordinator-Field organiser should be below the age of 45 years.

Prescribed application forms (eight copies) only for the post of Reader and Lecturer can be had from the University office. Desirous candidates are requested to send Indian Postal order of Rs. 5/- along with a self addressed envelope (Size 28 c.m. × 12 c.m.) with Postage worth Rs. 2.10 Ps. for Accompanist and Co-ordinator (Field Organiser) Posts applications may be sent on plain paper.

Eight copies of prescribed applications alongwith necessary enclosures attached to each copy of the applications and plain paper application alongwith the necessary true copies of the testimonials should reach the Registrar, Shivaji University, Vidyanagar, Kolhapur-416004 on or before **25th Sept. 1986.**

S.R. Salokhe
Ag. REGISTRAR

ASSOCIATION OF INDIAN UNIVERSITIES
AIU HOUSE, 16 KOTLA MARG, NEW DELHI-110002

Applications from Indian citizens are invited for the following posts in the prescribed forms available on payment of Rs. 2/- from the Office of the Association :

1. **Asstt. Accountant** : Scale of Pay Rs. 650-960 : One
   Ist class or high second class Commerce graduates. Should have passed at least Intermediate exam. of Chartered Accountants/Cost and Works Accountants of India, with at least 5 years supervisory experience. Persons with Computer Accounting experience will be preferred.
2. **Asstt. Section Officer** : Scale of Pay Rs. 650-960 : One
   Graduate with at least 5 years experience as a junior executive in University/ Govt. Office/ Research Establishment/ Autonomous Organisation. Persons with experience of organising meetings/seminars/symposia/Documentation and publication work will be preferred.
3. **Professional Assistant** : Scale of Pay Rs. 550-900 : One
   Candidates should possess a first or second class Master's Degree in one of the Social Sciences and a Master's Degree in Library/Information Science. Experience in Documentation will be preferred.
4. **Assistant** : Scale of Pay Rs. 425-800
   Graduate with at least five years experience in Educational Institutions/Govt. Autonomous Organisation. Experience in noting, drafting, maintenance of accounts/records of sales publications will be preferred.
5. **Stenographer** : Scale of Pay Rs. 425-800 : One
   Graduate with at least five years experience as a Junior Stenographer. Candidates should have a speed of 120 wpm/60 wpm in Shorthand and typing respectively.
6. **Lower Division Clerk** : Scale of Pay Rs. 260-400
   Higher Secondary with typing speed of 40 wpm. Preference will be given to those having office experience and knowledge of shorthand.
7. **Library Attendant** : Scale of Pay Rs. 210-270 : One
   Candidate should have passed higher secondary examination and certificate in Library Science in first or second division. Experience of working in a library will be preferred.

All posts carry usual allowances generally at the Central Govt. rates. Relaxation in any of the requirements may be made in exceptional cases. The Association reserves the right not to fill up any of the vacancies advertised if the circumstances so warrant. Canvassing in any form by or on behalf of a candidate will be a disqualification.

Applications complete in all respects should reach the Office by **15th September, 1986.** Applications received after the last date or without complete information may not be entertained. SC/ST/Ex-servicemen will be given preference.

INDIAN INSTITUTE OF CHEMICAL BIOLOGY

(Council of Scientific & Industrial Research)
4, Raja S.C. Mullick Road, Jadavpur,
Calcutta-700032.

ADVERTISEMENT NO. 2/86

Applications are invited for the following posts :

I. SCIENTIST 'C' : Two posts
(Rs. 1100-50-1600)

Post No. (i) :

Qualification : 1st class M.Sc., Ph.D. in Biochemistry/ Zoology/ Physiology with at least 6 years research experience for M.Sc. or 2 years for Ph.D. candidates as evidenced by publications in leading scientific journals in the area of molecular biology of animal virus.

Job requirement : The selected candidate will be required to carry on and guide researches on Gene Expression in Parasites like Leishmania.

Post No. (ii) :

Qualification : Ph.D. in any branch of Physical Science with 2 years of post doctoral experience M.Sc. with 6 years experience, M.E. with 4 years experience in Computer operation: software development, programming and graphics.

Job requirement : Selected candidate is to assume overall charge for development and maintenance of Computer Centre at the Institute and assist the Scientists for analysis of data.

II. SCIENTIST 'B' : Five posts
(Rs. 700-40-900-EB-40-1100-50-1300)

Qualification : 1st class M.Sc. in Biochemistry Chemistry Physics/ Physiology Zoology and three years research experience as evidenced by publications in leading journals. Ph.D. in above mentioned fields will be given preference.

Job requirement : The selected candidate will be required to carry on research on :

Post No. (i) : Synthetic organic chemistry in the field of natural product and application of physical methods in organic chemistry.

Post No. (ii) : (reserved for SC. General candidate may also apply) Biophysical chemistry of nucleic acids and interaction of nucleic acids with heterocyclic compounds.

Post No. (iii) : (reserved for ST. General candidate may also apply) Radiolabelling of organic compounds, radioanalysis and biodistribution studies.

Post No. (iv) : (reserved for SC. General candidate may also apply) Genetics and molecular biology of pathogenic bacteria.

Post No. (v) : (reserved for ST. General candidate may also apply) Molecular biology of seed proteins.

III. TECHNICAL ASSISTANT (Grade-III (2) : Three posts (Rs. 550-25-700-EB-30-900).

Post No. (i) :

Qualification : Graduate in any discipline and exposure to Computer Programming in Basic, Fortran or Cobol Languages - with at least 3 years' experience in project costing and budgeting.

Job requirement : To carry out work on Computerized data processing, information storage and retrieval, project costing and accounting.

Post Nos. (ii) and (iii) : (Post No. (iii) reserved for SC candidate)

Qualification : M.Sc. in Chemistry/Biochemistry/ Biological Sciences or B.Sc. (Chemistry or Biology Hons.) with 3 years experience in biochemical/ biological research.

Job requirement for Post No. (ii) : To assist in Enzyme research in parasite systems and in other types of biochemical research as assigned from time to time by the Project Leader.

Job requirement for Post No. (iii) : To assist in microbiological work which includes strain development, maintenance of culture and all other aspects of microbiological works.

IV. TECHNICAL ASSISTANT (Grade-III

(1) : Thirteen posts (8 posts reserved for General, 3 for SC and 2 for ST candidates) (Rs. 425-15-500-EB-15-560-20-700).

Post Nos. (i—xiii) :

Qualification : B.Sc. with Chemistry/ Physiology/ Zoology/ Physics as one of the subjects.

Job requirement : To work on culture and maintenance of parasites/routine work of a biochemical/chemical laboratory and the job as may be assigned from time to time by the Project Leader.

V. TECHNICAL ASSISTANT (Grade-III (1) : One post (Rs. 425-15-500-EB-15-560-20-700)

Qualification : Graduate in any discipline and some exposure to Computer Programming in Basic, Fortran or Cobol Languages.

Job requirement : To carry out work on computerized data processing, information storage and retrieval, project costing and accounting.

GENERAL CONDITIONS

1. The number of posts indicated above is likely to increase. The posts are temporary but likely to continue and carry usual allowances as admissible to Central Government employees stationed at Calcutta. All the pay scales are likely to be revised. The present emoluments at the minimum of the scale is as follows :

Scale of Pay	Emoluments
Rs. 1100-1600/-	Rs. 3025.50
Rs. 700-1300/-	Rs. 2123.98
Rs. 550-900/-	Rs. 1673.90
Rs. 425-700/-	Rs. 1513.91

The posts of Scientist 'C' and Scientist 'B' are contractual in the first instance for six years but also carry option for the pensionable benefits to the deserving candidates. Qualifications relaxable in the case of candidate otherwise well qualified and considered suitable for the posts.

2. Applications must be on forms which together with detailed instructions are obtainable from the ADMINISTRATIVE OFFICER, INDIAN INSTITUTE OF CHEMICAL BIOLOGY, 4, Raja S.C. Mullick Road, Jadavpur, Calcutta-700032, by sending a self-addressed 90 paise stamped envelop of 24X10 c.m. size. Number of advertisement, name of the post applied for and full address in BLOCK LETTERS must be indicated at the top of the request to be made by 30-8-1986 for obtaining application forms. Complete application on the prescribed forms together with an application fee of Rs 8.00 (no application fee in case of SC ST candidates) in the form of crossed Indian Postal Order payable in favour of the Indian Institute of Chemical Biology. Calcutta-700032 should reach by **16-9-1986.**

3. The name of post applied for and its serial number as appeared in the advertisement must be clearly indicated in the application form.

4. Persons in Government or Semi-government services must apply through proper channel. Advance copy of the application will not be considered unless original applications forwarded through proper channel are received within two weeks after the closing date. Applications which are not submitted in the prescribed form with requisite fee and not properly filled in as per requirements are liable to be rejected.

5. A lower standard of suitability in consistent with efficiency will be applied in respect of Scheduled Caste/Scheduled

Tribe candidates for the reserved posts. Candidates belonging to these communities should invariably enclose an attested copy of the original caste certificate issued by a competent authority with their application failing which they will not be entitled to the concessions otherwise admissible to them. In the event of non-availability of SC/ST candidates for the post of Scientist 'B', the post will be filled up by general candidate by following the prescribed procedure.

6. Physically handicapped candidates applying for the posts are exempt from payment of application fee provided they are otherwise eligible for appointment to the posts on the basis of the standards of medical fitness prescribed for the post (including any concessions specifically extended to the physically handicapped) and enclose with the application form a necessary certificate from a Government Hospital/Medical Board in support of his/her claim for being handicapped.

7. Candidates applying for more than one post should send separate application for each post. Outstation candidates selected for interview are entitled to single second class fare both ways by the shortest route from the normal place of residence or the place of undertaking the journey whichever is nearer to the place of interview.

8. Since it is not possible to call all the eligible candidates for interview, the applicants will be shortlisted for the purpose and the decision of the Director will be final.

9. Canvassing in any form and / or bringing in any influence political or otherwise will be treated as a disqualification for the post.

10. **INTERIM ENQUIRIES WILL NOT BE ENTERTAINED.**

BHOPAL UNIVERSITY

BHOPAL

No. 6170/Dev/BU/JRF/UGC/86
Dated : 23-8-86.

AWARD OF UGC JUNIOR RESEARCH FELLOWSHIP

Application on prescribed application form obtainable from the Registrar Bhopal University, Bhopal, are invited for award of Junior Research Fellowships.

The N.E.T. passed candidates after selection will get Junior Research Fellowship at the rate of Rs. 1000/- p.m. with a contingent grant of Rs. 3000/- p.a. for Humanities and Rs. 5000/- for Science subject. The candidates who have not qualified in National Educational Testing conducted by the University Grants Commission may also apply for Junior Research Fellowship, but the selected candidate will be paid Rs. 800/- p.m. and contingent assistance as stated above.

The tenure of fellowship is for two years in the first instance and extendable further on the basis of assessment as per guidelines prescribed by the University Grants Commission. The application may be submitted to the undersigned on or before **22nd September, 1986**. Applications which are incomplete and which are received after the due date will not be entertained.

No TA/DA will be paid to the candidates called for an interview.

Someshwar Gupta
REGISTRAR

DEVI AHILYA VISHWAVIDYALAYA, INDORE

UNIVERSITY HOUSE, INDORE-452 001.

No. Estt./III(16)/86 **Dated : 30-8-86**

ADVERTISEMENT

Applications in the prescribed forms are invited for the following posts in the University Teaching Departments/Computer Centre so as to reach the undersigned on or before **4th October, 1986.**

S. No.	Department	Post	Scale
1.	Computer Centre	(A) Head of Computer Centre—One post.	Rs. 1500-2500
		(B) System Engineer—One post.	Rs. 1200-1900
2.	Business Management	Lecturer—One post	Rs. 700-1600

2. Persons who have already applied for the post of Head of Computer Centre and System Engineer with ref. to Advt. No. Estt./III(12)/86 dated 26-5-1986 need not apply again. They may intimate any additional qualifications, Experience etc. acquired by them. For other post, no previous applications will be considered. They should apply afresh.

3. The present total emoluments on initial basic salary in each scale are as follows :

U.G.C. Scale of Pay	Emoluments on initial Basic Pay.
Rs. 1500-60-1800-100-2000-125/2-2500/-	Rs. 3138/-
Rs. 1200-50-1300-60-1900/-	Rs. 2815/-
Rs. 700-40-1100-50-1600/-	Rs. 1881/- Approximately.

4. Application form together with details of qualifications, specialisation etc. can be obtained from the University Office on payment of Rs. 5/- in person or by sending a Crossed Indian Postal Order of Rs. 10/- payable to the Registrar, Devi Ahilya Vishwavidyalaya, Indore.

C.P. Modi
ACTING REGISTRAR

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